SUMMARY OF OPERATIONS

DESTRUCTION OF TWO WATER-SUPPLY WELLS
BOEING REALTY CORPORATION C-6 FACILITY
LOS ANGELES, CALIFORNIA

Prepared for:

Integrated Environmental Services, Inc.

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

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Richard C. Slade & Associates
Consulting Groundwater Geologists
North Hollywood, California

RCS Job No. S9808

September 1998

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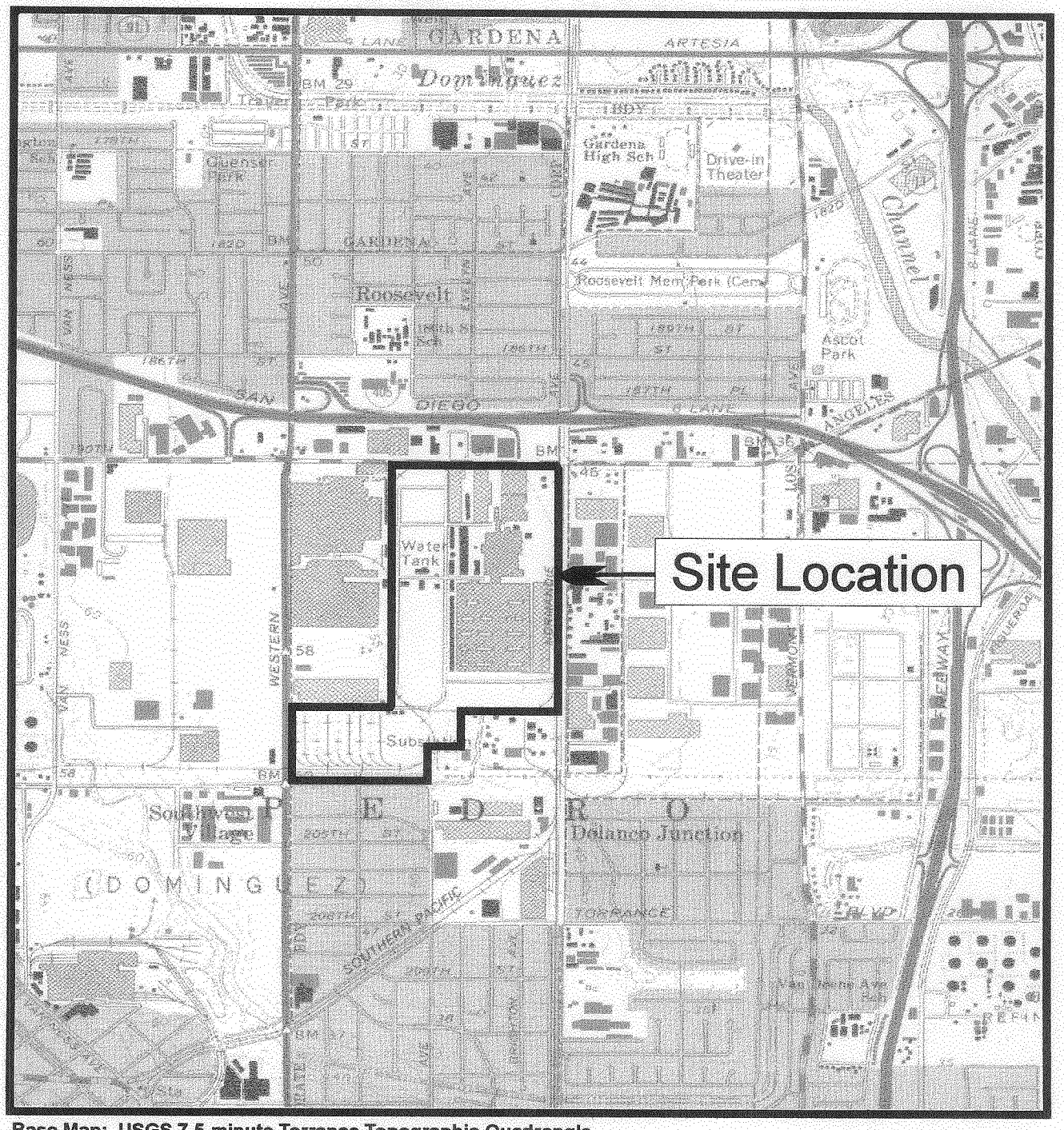
INTRODUCTION

This Summary of Operations report has been prepared to document procedures and methods used in the destruction of two former water-supply wells at the Boeing Realty Corporation (BRC) C-6 Facility. This facility, as seen on Figure 1 - Site Location Map - is located on the southwest corner of the intersection of 190th Street and Normandie Avenue, in the City of Los Angeles, California. Figure 2 -Well Location Map- illustrates the approximate location of the two water-supply wells at the facility.

Beylik Drilling Company (Beylik) of La Habra, California was the contractor that performed the actual well destruction work. Richard C. Slade & Associates, Consulting Groundwater Geologists (RCS) prepared the guidelines for destruction of the wells, and was present to monitor and observe the well destruction work at certain tasks, as herein described. RCS personnel also maintained liaison with Beylik personnel and Integrated Environmental Services, Inc. (IES) personnel (primarily Mr. Chris Stoker) during each work task to provide in-progress information on the well destruction work. The California Regional Water Quality Control Board (CRWQCB) was also apprised by IES of events during destruction of the wells.

All destruction procedures were performed based on an RCS Workplan June 1998 and were conducted in accordance with current California Department of Water Resources (DWR) well standards as outlined in DWR Bulletin 74-81 and its supplement DWR Bulletin 74-90. Prior to destruction, a Los Angeles County Department of Health Services (LACDHS) Well Destruction Permit was obtained by Beylik .

During work on the well destruction project, addenda to the original Workplan and other correspondence were submitted by RCS to IES personnel, based on conversations with IES personnel and based on RCS observations. Appendix I includes the addenda and correspondence submitted to IES personnel that outline the minor changes to the original Workplan and also provides the RCS final recommendations regarding destruction operations of the two wells.



Base Map: USGS 7.5-minute Torrance Topographic Quadrangle

0 2000 4000

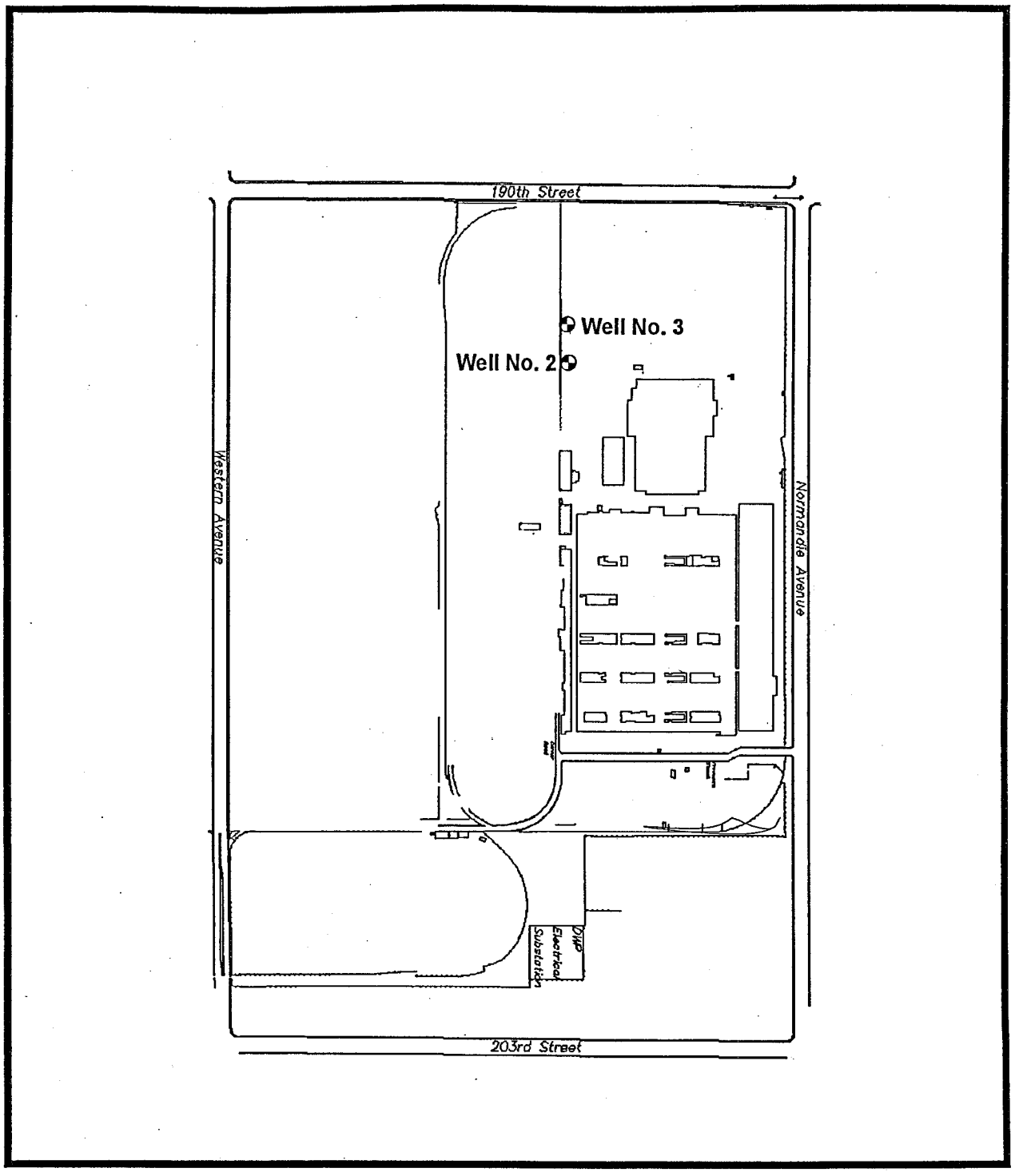
SCALE IN FEET

N

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

FIGURE 1
SITE LOCATION MAP
BOEING REALTY COMPANY C-6 FACILITY

RCS JOB NO. S9808 SEPTEMBER 1998



Base Map Modified from Integrated Environmental Services, Inc.

0 975 1950

SCALE IN FEET

N

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

FIGURE 2
WELL LOCATION MAP
BOEING REALTY COMPANY C-6 FACILITY

RCS JOB NO. S9808 SEPTEMBER 1998

BACKGROUND INFORMATION

Available information reveals that initially three water-supply wells, Nos. 1 through 3, were constructed at the subject site in the mid-1940's. According to Los Angeles County Department of Public Works, Flood Control District (LACFCD) data, the three wells are/were designated as follows:

Owner Well Number	LACFCD Number	U.S. Geological Survey Number	California Department of Water Resources Number
1	794A	T4S/R14W-1H1	T4S/R14W-1F1
2	794B	T4S/R14W-1H2	T4S/R14W-1F2
3	794C	T4S/R14W-1H3	T4S/R14W-1F3

Well No. 1 reportedly no longer exists at the site, and there are no records to document when and how Well No. 1 was destroyed. The remaining two wells (Nos. 2 and 3) had not been used in many years but were still equipped with deep well turbine pumps.

Original driller's logs reveal that Well Nos. 2 and 3 were drilled for the Aluminum Corporation of America (ALCOA) between July and September 1942. The wells were drilled by the Roscoe Moss Company, most likely by the cable tool drilling method. The following table shows the construction parameters of each well, as documented in the original driller's logs.

Well Number	Depth (ft, bgs)	Diameter of Steel Casing (inches)	Perforation Intervals (ft, bgs)
2	600	14	477-506 525-530 535-540
3	600	14	427-433 478-516 538-550

The perforations in each well were generally 5/16 inches in width and were 1-3/14 inches in length. A copy of the original driller's log for both wells is included in Appendix 2.

WELL DESTRUCTION PROCEDURES

The following work items were conducted during the destruction of each well.

1. *Pump Removal*

The existing well pump components (the turbine drive head, pump column, and pump bowls) in each well were removed by Beylik. Pump removal was performed utilizing an overhead lift to vertically extract the pump components from each well. During removal, the pump column in each well was torch-cut in lengths of 10 ft as the pump was removed from each well. After removal from each well, all pump components were left onsite for disposal by BRC; these components, due to their age, had no salvage value.

The pump from Well No. 3 was removed on July 6 and 7, 1998. Fourteen sections of 10-inch-OD, 10-ft-long pump column, one section of 4-foot-long column, and one section of 6-foot-long column were removed from this well. The underlying pump bowl assembly was approximately 11½ ft long, consisting of 15 stages (each stage was approximately 8 inches long). A 10-foot-long suction pipe with a 3-foot-long strainer were below the bottom of the bowls, and these lengths brought the original total depth of the pump intake in the well to approximately 174 feet.

The pump from Well No. 2 was removed on July 22 and 23, 1998. Seven sections of 7-inch-OD, 20-ft-long pump column were removed from the well. The pump bowl assembly was approximately 12 ft long, consisting of 16 stages (each stage being approximately 8 inches long). A 5-foot-long tail pipe brought the original total depth of the pump intake in the well to approximately 157 feet.

2. *Flocculation of Water in Casing*

To prepare the water in the well casing for video surveying in each well, a flocculent was used to remove and/or settle suspended material in the fluid column in the well. The

flocculent used consisted of a lime-water mixture prepared at the surface. This inert mixture was poured directly down each well and thereafter the well was allowed to set prior to performing additional work. Following flocculent application, Well No. 3 was allowed to set for a period of 48 hours and Well No. 2 was allowed to set for a 24-hour time period.

3. *Water Well Video Survey*

Following removal of the pump and flocculation of the fluid column, a video log survey was conducted in each well. This video survey used a combination vertical/sidescan color camera to examine and document, on VHS tape, the field of view of the blank and perforated sections of casing during the vertical descent of the camera into each well. The sidescan option was used to examine, at appropriate points and where necessary, the physical condition of the casing and/or perforations.

The video survey in Well No. 3 was performed on July 9, 1998 by Water Well Developers, Inc. of Anaheim, California. The video survey in Well No. 2 was performed on July 23, 1998 by the same company. An RCS geologist was present during each survey to record the casing conditions in each well as observed on the video log. A record of those observations is included in the Appendix.

Observation of the video survey for Well No. 3 revealed that the uppermost perforation intervals differed slightly than those documented in the original driller's log. For instance, top of perforations was observed at a depth of 423 ft bgs. However, the driller's log documents the top of perforations at a depth of 427 ft bgs. At a depth of 483 ft sediment fill was encountered. Thus, the intervals of the remaining perforations between 483 ft and 550 ft bgs could not be confirmed. Because the original depth of the well is 596 ft, the video log shows that approximately 113 ft of sediment fill occurred in the well at the time of the video survey.

Observation of the video survey for Well No. 2 revealed that perforations were generally observed where they are documented to occur on the driller's log of the well. However, due to poor visibility the perforations were difficult to see. Sediment fill occurred at a depth of approximately 544 ft bgs. The driller's log shows that the bottom of the well originally occurred at a depth of 596 ft bgs. Thus, based on the video log approximately 52 ft of sediment fill occurred at the time of the video survey.

4. *Bailing and Sampling of Sediment Fill*

Following the video survey, each well was found to contain sediment fill in the bottom of the casing. The thickness of this sediment fill was 113 ft in Well No. 3 and 52 ft in Well No. 2. This sediment fill in each well accumulated over time due to pumpage of fine grained formation sand. Such sand pumpage was common in old cable-tool drilled wells in the region due to the irregular size and slope of typical casing perforations and to the fine grained nature of several aquifers in the region.

A limited amount of the sediment fill that had accumulated in the bottom of each well was removed by bailing. This bailing was performed for the purpose of collecting sediment samples from the bottom of each well, which then could be transported to a laboratory for analysis. The objective of the sampling and analysis was to determine if the sediment fill, comprised of native fine-grained materials, could be left in place in each well.

Bailing consisted of lowering a 10-inch-diameter metal bailer equipped with a single bottom end flap to the bottom of each well to capture and lift the collected sample to the surface. After the bailer has been lowered to the bottom of each well, the bailer was repeatedly lowered and raised in short increments to move sediment up into the bailer. The bailer was then brought to the surface and the contents placed into a 290-gallon trough.

Bailing of Well No. 3 was conducted on July 13, 1998 and resulted in the removal of approximately 7 ft of sediment, bringing the total depth of the well to approximately 490 ft. Well No. 2 was bailed on July 24, 1998; approximately, 22 feet of sediment was removed from this well, resulting in a total well depth of approximately 566 feet.

The sediment bailed from the bottom of each well generally consisted of a medium to dark gray, fine- to coarse-grained sand containing minor accessory shell material. This bailed sediment was determined by RCS personnel to be native material.

The sediment samples were submitted to Del Mar Analytical Laboratory in Van Nuys, California, and analyzed for volatile organic compounds (VOCs, by EPA Method 8260), semi-volatile organic compounds (SVOCs, by EPA Method 8270), metals (including Chromium VI), and pH. Copies of the results of laboratory analyses for the sediment samples from each well are included in Appendix 4.

The results of laboratory analysis revealed that sediment from Well No. 3 indicated the presence of only one VOC, chloroform; its reported concentration was 0.0036 milligrams per kilogram (mg/Kg). All other VOCs or SVOCs were reported to be detected at concentrations below their respective laboratory limits in the sediment sample.

However, the Total Threshold Limit Concentration (TTLC) values for three metals, total chromium (Cr), copper (Cu), and nickel (Ni), were detected in the sediment sample from Well No. 3 in concentrations approximately 10 times above their Soluble Threshold Limit Concentration (STLC) values. As a result, those three metals were further analyzed for STLC extraction. The following table summarizes those results:

Metal	TTLC Sample Result (mg/Kg)	TTLC Maximum Limit (mg/Kg)	STLC Sample Result (mg/Kg)	STLC Maximum Limit (mg/Kg)
Cr (total)	97	2500	<0.10	5
Cu	300	2500	1.0	25
Ni	190	2000	0.29	20

The results of that test showed that the detected STLC values for each tested metal were reported to be below their respective STLC values. In addition, chromium VI was reported to be the at laboratory detection limit for that metal.

The metals were not leachable, as shown by the STLC testing. It is suspected that the Cr, Cu, and Ni detected in the original sediment sample may have been due to minor amounts of scale present in the sample (refer to and compare the sample analysis of sediment from Well No. 2, which contained no scale, with well No. 3 which contained scale; see below). This scale may have originated from either the well and/or pump column and was likely knocked off during removal of the pump or during bailing of the sediments. Therefore, the sediment samples from Well No. 3 are considered to be native material, and it was recommended that the

remaining sediment be left in place in the bottom of this well. Approximately 106 ft of sediment fill remained in Well No. 3 prior to final well destruction.

The results of laboratory analysis revealed that bottom sediment in Well No. 2 showed all reported VOC and SVOC concentrations to be below their laboratory detection limits. In addition, all metal concentration values were below their respective TTLC and STLC values. Further, chromium VI was reportedly not detected in the sediment sample.

Thus, the sediment samples from Well No. 2 are considered to be native materials, and it was recommended that the remaining sediment be left in place in the bottom of the well. Approximately 30 ft of sediment fill remained in the well prior to final well destruction.

5. *Perforation of Well Casing*

Because the depth to uppermost, existing perforations in each well begins at relatively great depths (477 ft and 427 ft in Well Nos. 2 and 3, respectively, based upon driller's logs), and because the video log surveys showed the existing perforations to be at least partially plugged, it was recommended that additional perforations be added to shallower portions of the casing to enable the eventual well grouting to enter additional native materials outside the existing casing. Hence, the upper portion of each casing was perforated with a down-well mechanical perforator tool. Additional perforations were placed within blank casing at depths ranging from 200 ft to 400 ft bgs, in each well as described below. A Mills knife, mechanical perforator was used to perforate the casing. Perforations consisted of 8 cuts per row, with each row being approximately one foot apart.

Well No. 3 was perforated on August 12, 1998 from 450 to 470 ft. Following this, cement grout was installed from 490 ft up to 385 ft bgs (as described in the following section). Then, on August 14, 1998, additional casing perforations were cut from 380 to 385 ft, 310 to 340 ft, 250 to 270 ft, and 200 to 220 ft in this well.

Well No. 2 was perforated on August 19, 1998 from 430 to 460 ft, and then cement grout was installed from 566 ft up to 346 ft bgs (as described in the following section). Then on August 21, 1998, well casing perforations were cut from 310 to 330 ft, 260 to 280 ft, and 210 to 230 ft in this well. Thereafter, cement grout was installed as described below.

6. *Well Grouting and Installation of Mushroom Cap*

The cement grout for well destruction was 10.3-sack mix sand-cement grout. Cement used for the seal was a standard brand Portland cement conforming to ASTM C150, Type II. There was not more than two parts by weight of sand to one part by weight of cement. The water-cement ratio was about 7 gallons per sack of cement (94 pounds).

The cement grout was injected into the well casing from the bottom upward by means of a temporary grout tremie pipe. Cement grout materials were placed by a positive displacement method using pumping. Grout was placed in each well between perforating the upper and lower zones (as discussed in No. 5 above), resulting in two separate lifts or grout placement.

The first lift in Well No. 3 was placed on August 13, 1998 and consisted of placing 3½ cubic yards (yd^3) of cement grout. This amount of grout filled the well from 490 ft bgs up to a depth of approximately 385 ft (105 lineal ft of cement grout). After perforating the upper casing zones (*i.e.*, above 385 ft bgs), perforations were placed in the intervals as noted in No. 5 above after which additional grouting was performed. The second lift of cement grout was installed on August 17. Approximately 10 yd^3 of cement grout were used to fill the casing for this lift from 385 ft up to a depth of 55 ft bgs (330 lineal ft of cement grout). On August 20, 1998, the area around the top of the well casing was excavated using a backhoe. The exposed casing was cut off at a depth of approximately 5 ft bgs, and the cement mushroom cap was installed. Approximately 6 yd^3 of cement grout were used in the installation of the mushroom cap in Well No. 3. Copies of the cement delivery tickets are included in Appendix 5. After the mushroom cap set, the excavation was backfilled with native earth materials up to the level of adjoining grade.

The first lift in Well No. 2 was placed on August 20, 1998 and consisted of placing 7 yd^3 of cement grout. This amount of grout filled the well from 566 ft bgs up to a depth of approximately 346 ft (220 lineal ft of cement grout). After grouting, perforations were placed in selected casing intervals above 346 ft bgs, (see depths in previous section), after which additional grouting was performed.

On August 27, 1998, the remaining 4 ft of well was cemented in by Beylik personnel. As a result, the second lift of cement grout in Well No. 2 was installed on August 24, 1998. Approximately 16 yd^3 of cement grout were used to fill the casing from 346 ft up to a depth of 4

ft bgs (342 lineal ft of cement grout). Copies of the cement delivery tickets are included in Appendix 5.

Just prior to conducting the final grouting of the remaining portion of Well No. 2, Mr. Chris Stoker of IES obtained approval from the CRWQCB to grout up the entire well and to perform the installation of the mushroom cap at a later date, during demolition of nearby structures at the site.

Closure

The following paragraphs summarize destruction operations at Well Nos. 2 and 3.

A. The pump head, all pump column, and pump bowls were removed from each well. A total of 174 ft of pump column and bowls were removed from Well No. 3 and a total of 157 ft were removed from Well No. 2.

B. An inert lime-water solution was added to each well to improve water clarity for a video survey in each well.

C. Observation of the video surveys revealed a static water level in each well at 106 ft bgs. Sediment fill was encountered in Well No. 3 at a depth of approximately 483 ft. Sediment fill was encountered in Well No. 3 at a depth of approximately 544 ft bgs. Generally the well casing in each well was encrusted with scale/biofilm and perforations were generally partially clogged to clogged.

D. Laboratory analyses of a sample of sediment fill near the bottom of each well indicated that the sediment fill is considered to be native earth materials. As a result the remaining fill after bailing (30 ft in Well No. 2 and 106 ft in Well No. 3) was left in the bottom of each well during the well destruction process.

E. Due to the clogged to partially clogged perforations in each well, a casing perforator tool was used to place additional perforations in each well. Initially, additional perforations were placed in the 430-foot to 460-foot range in Well No. 2 and in the 450-foot to 470-foot range in Well No. 3.

F. Following the initial set of additional perforations, an initial lift of cement grout was installed in each well. In Well No. 3 cement grout was installed from 566 ft to 346 ft and used a total of 7 yd^3. In Well No. 3, 3½ yd^3 of cement grout was installed from 490 ft up to 385 ft bgs.

G. After the initial lift of grouting in each well, additional perforations were installed in the well casing. In Well No. 2, additional perforations were placed

in the 210- to 230-foot, 260- to 280-foot, and 310- to 330-foot interval. In Well No. 3, additional perforations were placed in the 200- to 220-foot, 250- to 270-foot, 310- to 340-foot, and 380- to 385-foot intervals.

H. A second lift of grout was then placed after the additional perforations had been cut into the casing of each well. In Well No. 2, the remaining well casing was grouted from 346 ft up to ground surface. Approximately 16 yd^3 of cement were used to grout Well No. 2 from 346 ft up to 4 ft bgs. The upper 4 ft in Well No. 2 were cemented-in manually. Cut-off of the upper 4 ft of casing and installation of the final mushroom cap in Well No. 2 are to be completed at a later time, during demolition of other nearby structures at the site.

In Well No. 3, approximately 16 yd^3 of cement grout were used to fill the well casing from 385 ft to ground surface and to install the mushroom cap (following excavation of the well pad and cut-off of the casing to 5-feet bgs). After installation of this mushroom cap, the small excavation was backfilled, thereby completing the destruction of Well No. 3.

The above outlined procedures were conducted in accordance with DWR Bulletin 75-81 and 74-90 guidelines. As a result, complete destruction of the two wells has been achieved and request for project closure is hereby requested. The attachments and appendices complete this report.

Respectively submitted:
RICHARD C. SLADE & ASSOCIATES;

Earl F. LaPensee
Certified Hydrogeologist No. 134

Richard C. Slade
Certified Engineering Geologist No. 929

APPENDIX 1
ADDENDA AND CORRESPONDENCE

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

July 24, 1998

Mr. Chris Stoker, Program Manager
Integrated Environmental Services, Inc.
3990 Westerly Place, Suite 210
Newport Beach, California 92660

Job S9808

Re: Video Log Results and Final Recommendations
For Destruction of Well No. 2
Boeing Realty Corporation C-6 Facility, Torrance, California

Dear Mr. Stoker:

Presented herein are the results of the video log survey of Well No. 2 and our final recommendations for the permanent destruction of this well.

Video Log Results

On Thursday, July 23, 1998 at 2:00 pm a video log survey of the subject well was performed by Mr. John MacDonald of Water Well Redevelopers, Inc. of Anaheim. Witnesses to the video log included Mr. Dean Garcia of Beylik Drilling Company, Ms. Joann Ornelas, yourself, and Earl LaPensee of Richard C. Slade & Associates. Mr. John Marasco, Site Superintendent for Boeing Realty Company, was present for a portion of the survey also. No one from the California Water Quality Control Board–Los Angeles Region was present during the video log survey. It should be noted that the conditions observed in Well No. 2 are similar in many respects to those observed during the video survey conducted in Well No. 3.

Unperforated (blank) well casing (14 inches in diameter) was observed from ground surface to a depth of approximately 477 ft below grade surface (bgs), the depth at which the uppermost perforations in the casing were first observed. The water surface in the well was observed to occur at 106 ft bgs, similar to that observed in Well No. 3. No oil was observed on this water surface. The clarity of the video survey was generally good from ground surface to an approximate depth of 215 ft bgs. However, below that depth the clarity decreased markedly due to the presence of floating material and cloudy water, even though the well was treated with lime solution and water was allowed to flow into the well for a minimum period of 26 hours. At particular depth intervals, the casing walls were barely observable although discernible.

At present, the potentiometric, non-pumping water level in the well occurs approximately 371 feet above the uppermost perforations. Because of this, the groundwater is under a strong positive hydraulic head. As stated for Well No. 3 this strong hydraulic head

would tend to preclude any shallower groundwater, if it occurs, from entering the casing during perforation of the 200-foot to 400-foot zone.

From about 215 ft bgs to the total depth of the well at 544 ft bgs, the clarity of the video log was poor. As a result, it was generally difficult to observe the perforations and/or the walls of the casing. However, it could be determined through the use of the side scan camera view that the uppermost perforations occur at 477 ft bgs and the bottom-most perforations occur at a depth of approximately 540 ft bgs. This confirms the general interval of perforations as noted in the drillers' log of the well. During vertical descent of the camera it was observed that there are no obvious holes, ruptures or collapses in the casing from ground surface to the present bottom of the well at 544 ft bgs. Because the bottom of the well is documented in the drillers' logs at a depth of 596 ft bgs then approximately 52 ft of sediment fill occurs in the well.

Where visible, existing perforations are of the hydraulic Mills knife variety. This further corroborates the cable too-drilled method of well construction. These perforations, where visible, appear to be plugged to a varying degree. Scale, also appears to occur to a varying degree on the inside of the blank casing. Such scaling and partial plugging of well casing is a typical phenomenon in older wells.

Final Recommendations for Well Destruction

Based on the video log survey, the following are our final recommendations for destruction of Well No. 2.

1. Leave the existing 52-feet of sediment fill in the bottom of the well; this material represents fine- to coarse-grained sand and silt that entered through the large and irregularly-shaped Mills-knife cut perforations when the well was pumping. The amount of fill indicates that this well produced some amount of sand, although of lesser quantity than that apparently produced by Well No. 3.
2. Place a 10.3-sack mix sand-cement grout, using a temporary grout tremie pipe, in the depth zone from 400 ft to the bottom of the well. Cement grout materials shall be placed by a positive displacement method by pumping through the tremie pipe.
3. Allow this cement to set for 24 hours.
4. Utilize the hydraulic perforator tool to create additional new perforations in the casing as follows:
    - 380 to 400 ft
    - 310 to 340 ft
    - 250 to 270 ft
    - 200 to 220 ft

5. Place a similar sand-cement grout in the depth zone from 200 to 400 ft, using the same positive displacement pumping method.
6. Allow this cement to set for 24 hours.
7. Following setting of cement seal, the mushroom cap may be installed. Details concerning the cement type and the installation of the mushroom cap, etc. are provided in our Workplan dated June 1998.

Very truly yours,
RICHARD C. SLADE & ASSOCIATES

Richard C. Slade
Registered Professional Hydrogeologist
American Institute of Hydrology No. 106

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

July 9, 1998

Mr. Chris Stoker, Program Manager
Integrated Environmental Services, Inc.
3990 Westerly Place, Suite 210
Newport Beach, California 92660

Job S9808

Re: Video Log Results and Final Recommendations
For Destruction of Well No. 3
Boeing Realty Corporation C-6 Facility, Torrance, California

Dear Mr. Stoker:

Presented herein are the results of the video log survey of Well No. 3 and our final recommendations for the permanent destruction of this well.

Video Log Results

This morning a video log survey of the subject well was performed by Mr. John MacDonald of Water Well Redevelopers, Inc. of Anaheim. Witnesses to the video log included Mr. Dean Garcia of Beylik Drilling Company, yourself and the undersigned. Mr. John Marasco, Site Superintendent for Boeing Realty Company, was present for a portion of the survey also. No one from the California Water Quality Control Board–Los Angeles Region was present during the survey.

Unperforated (blank) well casing (14 inches in diameter) was observed from ground surface to a depth of 423 ft, the depth at which the uppermost perfs in the casing were first observed. The present water surface in the well occurs at 106 ft. Virtually no oil was observed on this water surface. The clarity of the video survey was good from ground surface. Casing joints, where visible, were typically encountered at 4-ft intervals; this is typical for cable tool-drilled wells.

The water surface occurs approximately 317 feet above the uppermost perforations. Because of this, the groundwater is under a strong positive hydraulic head. This strong head would preclude any shallower groundwater, if it occurs, from entering the casing during perforation of the 200- to 400-ft zone. However, it is unlikely that groundwater would be present in that depth zone since the driller's log for the well reveals the lithology to consist predominantly of a "Blue Clay."

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From about 426 ft (*i.e.*, just below the depth of the uppermost perforations at 423 ft) to about 445 ft, the clarity of the video log was poor, and it was difficult to observe the perforations and/or the walls of the casing. Hence, the length of the uppermost zone of casing perforations (on the driller's log it is from 427 to 433 ft) could not be determined. However, because this zone actually began at 423 ft, the bottom of this zone is likely at or near 429 ft. Below 445 ft, water clarity improved again.

The next set of perforations were observed to begin at a depth of 475 ft. Per the original driller's log, this set was reported to be from 478 to 516 ft. At a depth of 483 ft, the camera encountered sediment fill; this depth represents the present bottom of the well. The original cased depth of the well was 596 ft. Hence, there is now approximately 113 ft of fine-grained sediment fill in the lower portion of the well.

As the camera descended into the well, side scan (horizontal) views of the camera were made to provide better observation of the perforations and/or walls of the casing. Such side scans were performed at 247 ft, 425 ft, 445 ft, 453 ft, 465 ft, and 477 ft. These observations coupled with observations of the well casing during vertical descent of the camera revealed there are no obvious holes, ruptures or collapses in the casing from ground surface to the present bottom of the well at 483 ft.

Where visible, existing perforations are of the hydraulic Mills knife variety, further corroborating the cable too-drilled method of well construction. These perforations appear to be plugged to a varying degree. Scale also appears to occur to a varying degree on the inside of the blank casing. Such scaling and partial plugging of well casing is a typical phenomenon in older wells.

Final Recommendations for Well Destruction

Based on the video log survey, the following are our final recommendations for destruction of Well No. 3.

1. Leave the existing sediment fill in the bottom of the well; this material represents fine-grained sand and silt that entered through the large and irregularly-shaped Mills-knife cut perforations when the well was pumping. In essence, the well was a "sander."
2. Utilize a down-hole, hydraulic perforator tool to cut new perforations in the casing between the depths of 450 ft and 470 ft.
3. Place a 10.3-sack mix sand-cement grout, using a temporary grout tremie pipe, in the depth zone from 400 ft to 483 ft. Cement grout materials shall be placed by a positive displacement method by pumping through the tremie pipe.
4. Allow this cement to set for 24 hours.

5. Utilize the hydraulic perforator tool to create additional new perforations in the casing as follows:

   - 380 to 400 ft
   - 310 to 340 ft
   - 250 to 270 ft
   - 200 to 220 ft

6. Place a similar sand-cement grout in the depth zone from 200 to 400 ft, using the same positive displacement pumping method.

7. Allow this cement to set for 24 hours.

8. Following setting of cement seal, the mushroom cap may be installed. Details concerning the cement type and the installation of the mushroom cap, etc. are provided in our Workplan dated June 1998.

Very truly yours,
RICHARD C. SLADE & ASSOCIATES

Richard C. Slade
Registered Professional Hydrogeologist
American Institute of Hydrology No. 106

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

MEMORANDUM

DATE: June 29, 1998

TO: Chris Stoker, Integrated Environmental Services

FROM: Richard C. Slade, Richard C. Slade & Associates

RE: Change to Workplan
Well Casing Perforation.

Based on our conversation with you today, we understand that the California Regional Water Quality Control Board (RWQCB) has expressed concern over one aspect of our proposed method of destroying the two onsite Boeing Realty Corporation C-6 Facility water-supply wells. Specifically, the RWQCB is very concerned with the time lag between perforation of the casing above the screened zone in each well and the final sealing of each well with grout.

We note their concern and, as a result, recommend that the well sealing work be conducted as follows in each well:

1) Following bailing of sediment fill, seal the lower (known) perforations with grout up to a depth of approximately 400 ft in each well.

2) Allow the grout set for a minimum of 24-hours.

3) Perform down-hole perforation of the casing above the newly grouted zone in each well up to a depth of approximately 200 ft bgs.

4) Seal the remaining portion of the well up to a depth of approximately 50 ft bgs.

As a result of the change to the workplan conditions there likely will be no change in costs for the project. In addition, the contractor is scheduled to commence work at the site on or before July 6, 1998.

If you have any questions regarding this memorandum, please call me.

MAIN OFFICE: 6442 COLDWATER CANYON AVE., SUITE 214. NORTH HOLLYWOOD, CALIFORNIA 91606 TELEPHONE: (818) 506-0418
NAPA VALLEY OFFICE: ST. HELENA, NAPA VALLEY, CALIFORNIA 94574 TELEPHONE: (707) 963-3914

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

June 19, 1998

Mr. Chris Stoker
Integrated Environmental Services
3990 Westerly Place, Suite 210
Newport Beach, California 92660

RE: Addendum to Workplan for Destruction of
Two Water-Supply Wells at the Boeing Realty
Corporation C-6 Facility, Los Angeles, California
Workplan dated June 1998

Dear Mr. Stoker:

This letter amends the above titled workplan with regard to sampling and analysis of the bailed sediment from each water-supply well, outlined on Page 6 of the workplan, as follows:

1) Delete analysis for nitrate.

2) Add analyses for the sediment samples for volatile organic analysis (VOCs) utilizing Environmental Protection Agency (EPA) method 8260, semi-volatile organic compounds (SVOCs) utilizing EPA method 8270.

3) Add analysis for metals and pH.

If you have any questions regarding this letter, please call us.

Very truly yours,

Earl F. LaPensee

MAIN OFFICE: 6442 COLDWATER CANYON AVE., SUITE 214, NORTH HOLLYWOOD, CALIFORNIA 91606 TELEPHONE: (818) 506-0418
NAPA VALLEY OFFICE: ST. HELENA, NAPA VALLEY, CALIFORNIA 94574 TELEPHONE: (707) 963-3914

RICHARD C. SLADE & ASSOCIATES
CONSULTING GROUNDWATER GEOLOGISTS

MEMORANDUM

DATE: June 18, 1998

TO: Chris Stoker, Integrated Environmental Services

FROM: Richard C. Slade, Richard C. Slade & Associates

RE: Reply to Regional Water Quality Control Board Letter (RWQCB) dated June 22, 1998, regarding the "Workplan for Destruction of Two Water-Supply Wells at the Boeing Realty Corporation C-6 Facility, Los Angeles, California"

This memorandum outlines our reply to three items outlined by the RWQCB with regard to their review of the Destruction Workplan for the two wells at the Boeing Realty Corporation C-6 Facility in Los Angeles, California.

Item No. 1: Shallow groundwater contamination and perforation of well casing.

The RWQCB is concerned with the likelihood of contamination of the deeper aquifers contaminated by shallow groundwater during perforation of the upper portion of the well casing in each well. It is recognized that shallow groundwater has the potential for entering the wells during perforation. However, the time between perforation of the casing in each well and grouting of the well is on the order of a few days. Therefore the likelihood of contaminants being introduced into the deeper aquifers is low.

There are no known data on the potentiometric surface in each aquifer penetrated by the wells, due to the method of construction. However, the drillers' logs do reveal that water was first encountered at a depth of 67 ft, in Water Well No. 2, and 78 ft, in Water Well No. 3 (see Appendix 1 of Workplan). Regardless, current perforations in the two wells begin at depths of 540 ft in Water Well No. 2 and 550 ft in Water Well No. 3.

Item No. 2: Well sediment samples.

The samples will be analyzed for a complete suite of analyses, including SVOCs, VOCs, metals, and pH. Nitrate will be deleted from the specifications. These changes will be presented to you in an addendum to the workplan.

MAIN OFFICE: 6442 COLDWATER CANYON AVE., SUITE 214, NORTH HOLLYWOOD, CALIFORNIA 91606 TELEPHONE: (818) 506-0418
NAPA VALLEY OFFICE: ST. HELENA, NAPA VALLEY, CALIFORNIA 94574 TELEPHONE: (707) 963-3914

Item No. 3: Oil (free product) in well.

The RWQCB is concerned with the presence of oil in the well, if it is detected, and its impact on the aquifer, if any. Generally, the presence of oil is of no concern for the following reasons:

1. The oil, if encountered, would be lubricating oil for the deep well turbine pump and, hence, it would likely be free of all additives and other potentially toxic material.

2. The oil, if present, would be of a limited and relatively small volume.

3. The oil, if present, would only occur at the surface of the water, which is located in the blank well casing, considerably above the uppermost perforations in either well. Moreover, neither well has been reportedly pumped for at least 10 years or more.

4. Each well has perforations commencing at 540 ft to 550 ft (see Appendix 1 of Workplan). At originally reported pump rates of 810 gpm, for Water Well No 2, and 1375 gpm, for Well No. 3, drawdowns were 29 and 33 ft, respectively. This resulted in original specific capacities of approximately 28 gpm/ft ddn, for Well No. 2, and 42 gpm/ft ddn, for Water Well No. 3. Thus, original pumping levels were shallow, ranging from 112 ft to 116 ft and probably remained that way throughout the pumping history of the well. Such pumping levels are considerably above the uppermost perforations in either well.

The lubricating oil, if any, has never been below top of perforations and, consequently, has never come into direct contact with any aquifer in the well. As a result, it is not possible for the oil to have any impact on aquifers perforated by the wells. Thus, it is our recommendation that the oil not be sampled and analyzed.

Should you have any questions regarding this memorandum, please call us.

APPENDIX 2
ORIGINAL DRILLER'S LOGS OF WELLS

(DEFENSE PLANTS CORPORATION)

ROSCOE MOSS COMPANY

4360 WORTH STREET
LOS ANGELES, CAL.

WELL CONTRACTORS — RENTAL TOOLS

Well No. 2

Log of Well No. 2 Drilled for Aluminum Co. of America
Of Torrance, California.
Exact Location 190th and Normandie Sts., Los Angeles, Cal.
Started Work August 31, 1942
Completed Work September 17, 1942
Total depth 600' Size of shoe
600' ft. of 14 inch 10 gauge casing used and left in Well

Type of Perforator used Hydraulic

Perforated	540	ft. to	535	ft.	8	Holes per 4	5/16" inches
"	530	" "	525	"	8	" " 4	" "
"	506	" "	477	"	8	" " 4	" "

Make diagram of perforation in square, showing dimensions.

Diameter of Perforations 5/16 inches
Length of Perforations 1-3/4 "
Depth at which water was first found 67 ft.
Standing level before perforating 64 to 79 "
Standing level after perforating 83' "

Note below your observation of any change in water level while drilling

Water level when first started Test 83 ft.
Draw down from standing level "
No. of gallons per minute pumped when Test first started
No. of gallons per minute pumped when Test completed 810
Draw down at completion of Test 29 ft.

Formation: Mention size of water gravel—

0	ft. to 65	ft.	Sandy clay
65	" " 157	"	Sandy clay-soft streaks.
157	" " 185	"	Fine sand
185	" " 212	"	Blue sand and clay
212	" " 420	"	Blue clay.
420	" " 428	"	Fine sand to 3/8" gravel.
428	" " 434	"	Blue sand and clay
434	" " 456	"	Blue clay.
456	" " 462	"	Fine sand and clay.
462	" " 475	"	Blue clay
475	" " 482	"	Sand and gravel to 1".
482	" " 486	"	Clay and gravel.
486	" " 504	"	Sand and gravel to 2".
504	" " 522	"	Sand and clay
522	" " 528	"	Sand to 3/4" gravel.
528	" " 533	"	Fine sand some gravel.
533	" " 538	"	Sand and gravel to 3/4".

Formation size of water gravel—

0	ft. to	65	ft.	Sandy clay
65	" "	157	"	Sandy clay-soft streaks.
157	" "	185	"	Fine sand
185	" "	212	"	Blue sand and clay
212	" "	420	"	Blue clay.
420	" "	428	"	Fine sand to 3/8" gravel.
428	" "	434	"	Blue sand and clay
434	" "	456	"	Blue clay
456	" "	462	"	Fine sand and clay.
462	" "	475	"	Blue clay
475	" "	482	"	Sand and gravel to 1".
482	" "	486	"	Clay and gravel.
486	" "	504	"	Sand and gravel to 2".
504	" "	522	"	Sand and clay
522	" "	528	"	Sand to 3/4" gravel.
528	" "	533	"	Fine sand some gravel.
533	" "	538	"	Sand and gravel to 3/4".
538	" "	545	"	Sand and clay
545	" "	600	"	Sandy clay

If reducing strings of casing were cut off, state how cut

Depth from surface cut ..... ft.

Size of casing cut ..... in.

Lap in larger casing ..... ft.

Was adapter or cement used? .....

If casing was swedged or repaired, state depth, describe repairs and condition in which casing was left and probable future effect:

Make drawing of adapter or in square, showing dimensions.

Is well straight, top to bottom? Practically.

If not, what is the variation? .....

Will there be any detrimental effect on pump? None

If so, what effect? .....

Give any additional data which may be of future value

Hole plugged to 596!

Driller must fill in report as work progresses and report must be complete for his successor.

Date of report September 21, 1942

W. Peterson, Driller

Type and Rig No. used No. 23

(Defense Plants Corporation)

ROSCOE MOSS COMPANY

4360 WORTH STREET
LOS ANGELES, CAL.

WELL CONTRACTORS
RENTAL TOOLS

Log of Well No. 4 8 Drilled for Aluminum Company of America
of Los Angeles, Calif.
Exact Location 190th and Normandie Ave., Los Angeles, Calif
Started Work July 31, 1942
Completed Work August 29, 1942
Total depth 600 Size of shoe
600 ft. of 14 inch 10 ~~xxxx~~ gauge casing used and left in Well

Type of Perforator used Hydraulic

Perforated	550	ft. to	538	ft.	8	Holes per	4	5/16" inches.
"	516	" "	478	"	8	" "	4	" "
"	433	" "	427	"	8	" "	4	" "

Make diagram of perforations to scale, showing dimensions.

Diameter of Perforations 5/16 inches
Length of Perforations 1-3/4 "
Depth at which water was first found 78 ft.
Standing level before perforating 78 "
Standing level after perforating 83 "
Note below your observation of any change in water level while drilling

Water level when first started Test 83 ft.
Draw down from standing level "
No. of gallons per minute pumped when Test first started
No. of gallons per minute pumped when Test completed 1375
Draw down at completion of Test 33 ft.

Formation: Mention size of water gravel—

0	ft. to	3	ft.	Top soil
3	" "	68	"	Clay
68	" "	118	"	Sandy clay-soft streaks
118	" "	122	"	Fine brown sand
122	" "	134	"	Brown sandy clay
134	" "	153	"	Blue clay-streaks sand.
153	" "	187	"	Fine blue sand.
187	" "	214	"	Blue sandy clay
214	" "	316	"	Blue clay
316	" "	324	"	Blue clay-1/4" embedded gravel.
324	" "	330	"	Blue clay
330	" "	333	"	Blue clay 1/4" embedded gravel.
333	" "	418	"	Blue clay
418	" "	424	"	Fine muddy sand some 1/4" to 1/2" gravel.
424	" "	432	"	Fine sand to 3/8" clay
432	" "	427	"	Fine sand and clay

Well No. 3

Formation size of water gravel—

0	ft. to	3	"	Top soil
3	" "	68	"	Clay
68	" "	118	"	Sandy clay-soft streaks
118	" "	122	"	Fine brown sand
122	" "	134	"	Brown sandy clay
134	" "	153	"	Blue clay-streaks sand.
153	" "	187	"	Fine blue sand.
187	" "	214	"	Blue sandy clay
214	" "	316	"	Blue clay
316	" "	324	"	Blue clay-1/4" embedded gravel.
324	" "	330	"	Blue clay
330	" "	333	"	Blue clay 1/4" embedded gravel.
333	" "	418	"	Blue clay
418	" "	424	"	Fine muddy sand some 1/4" to 1/2" gravel.
424	" "	432	"	Fine sand to 3/8" clay
432	" "	437	"	Fine sand and clay
437	" "	460	"	Blue sandy clay
460	" "	470	"	Fine sand and clay
470	" "	474	"	Blue clay
474	" "	482	"	Sand and gravel to 1".
482	" "	495	"	Sand and gravel to 3/4"
495	" "	515	"	Sand and gravel to 2".
515	" "	519	"	Sand and gravel to 1/2" Muddy
519	" "	536	"	Fine sand and clay.
536	" "	547	"	Sand and gravel to 1".
547	" "	573	"	Fine sandy clay.
573	" "	600	"	Blue clay.
	" "		"	
	" "		"	
	" "		"	
	" "		"	
	" "		"	

If reducing strings of casing were cut off, state how cut

Depth from surface cut ..... ft.

Size of casing cut ..... in.

Lap in larger casing ..... ft.

Was adapter or cement used? .....

If casing was swedged or repaired, state depth, describe repairs and condition in which casing was left and probable future effect:

Make drawing of adapter in square, showing dimensions.

Is well straight, top to bottom? Practically.

If not, what is the variation? .....

Will there be any detrimental effect on pump? None

If so, what effect? .....

Give any additional data which may be of future value.....

Cement Plug installed to 596'.

Driller must fill in report as work progresses and report must be complete for his successor.

Date of report September 2, 1942.

Type and Rig No. used #23

W. Peterson, Driller

APPENDIX 3
VIDEO SURVEY LOG SUMMARIES

VIDEO SURVEY LOG
BRC WELL NO. 2
JULY 23, 1998

Depth (ft*)	Observed Casing Conditions
0 to 106	Blank casing with minor oil stains to 10 ft bgs. Casing joints every 4 feet. Noted sounding tube near ground surface.
106	Water surface, clear, no oil, no organic matter.
130, 167	Growths visible, minor scale below 130 ft.
175	Growths increasing, some cloudiness of water.
215-225	Water very cloudy, Casing walls barely visible. Water clears at little 225 ft.
258	Water becomes cloudy again and casing wall barely visible. Abundant biomass in water column.
305	Water clears slightly.
477	Side scan reveals top of perforations.
506	Hard to discern bottom of perforations.
525	Top of next set of perforations.
530, 535	Hard to discern bottom and top of perforations, at 530 and 535 ft respectively.
539-540	Bottom of perforations.
544	Fade to black, sediment fill.

***Note: (1) Depths are measured from ground surface at side scan camera, which is 2-feet above back of light. Numbers above corrected. Video survey performed by Water Well Redevelopers of Anaheim.**

VIDEO SURVEY LOG
BRC WELL NO. 3
JULY 9, 1998

Depth (ft*)	Observed Casing Conditions
0 to 106	Blank casing with abundant scale. Casing joints every 4 feet.
106	Water surface, clear, no oil, no organic matter. Light scale on casing. Water clarity good.
423	Top of perforations.
423 to 445	Water clarity generally poor.
445,453,465	Side scans show blank casing.
475	Within next set of perforations.
483	Fade to black, sediment fill. Still in perforations.

***Note: (1) Depths are measured from ground surface at side scan camera, which is 2-feet above back of light. Numbers above corrected. Video survey performed by Water Well Redevelopers of Anaheim.**

APPENDIX 4
RESULTS OF LABORATORY ANALYSIS OF WELL BOTTOM SEDIMENT SAMPLES

RESULTS OF LABORATORY ANALYSIS
WELL NO. 3

Del Mar Analytical

2852 [illegible]n Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1228
1014 E. Cooley L[illegible]te A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3402

R. C. Slade & Associates	Client Project ID: S9508	Sampled:	Jul 13, 1998
6442 Coldwater Canyon		Received:	Jul 13, 1998
North Hollywood, CA 91606	Sample Descript: Soil, Soil/Sand Well #3	Extracted:	Jul 14, 1998
Attention: R. Slade	Lab Number: HG01501	Analyzed:	Jul 14, 1998
	QC Batch: HG14071S	Reported:	Jul 15, 1998

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	**2.0**	**3.6**	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	99%
Toluene-d8 (81-117)	104%
4-Bromofluorobenzene (74-121)	98%

Del Mar Analytical

2852 A[illegible]n Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-12
1014 E. Cooley L[illegible]te A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-10
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1E
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Method Blank

QC Batch: HG14071S

Extracted: Jul 14, 1998
Analyzed: Jul 14, 1998
Reported: Jul 15, 1998

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	103%
Toluene-d8 (81-117)	103%
4-Bromofluorobenzene (74-121)	96%

Del Mar Analytical

2852 [illegible]on Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-12
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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Client Project ID: S9508

Sample Descript: Soil, Soil/Sand Well #3
Lab Number: HG01501
QC Batch: HG14SE1S

Sampled: Jul 13, 1998
Received: Jul 13, 1998
Extracted: Jul 14, 1998
Analyzed: Jul 16, 1998
Reported: Jul 16, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 3550/8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene	100	N.D.	Dimethyl phthalate	100	N.D.
Acenaphthylene	100	N.D.	4,6-Dinitro-2-methylphenol	250	N.D.
Aniline	150	N.D.	2,4-Dinitrophenol	250	N.D.
Anthracene	100	N.D.	2,4-Dinitrotoluene	100	N.D.
Azobenzene	150	N.D.	2,6-Dinitrotoluene	100	N.D.
Benzidine	1,000	N.D.	Di-N-octyl phthalate	500	N.D.
Benzoic Acid	500	N.D.	Fluoranthene	100	N.D.
Benz(a)anthracene	100	N.D.	Fluorene	100	N.D.
Benzo(b)fluoranthene	200	N.D.	Hexachlorobenzene	100	N.D.
Benzo(k)fluoranthene	200	N.D.	Hexachlorobutadiene	100	N.D.
Benzo(g,h,i)perylene	150	N.D.	Hexachlorocyclopentadiene	500	N.D.
Benzo(a)pyrene	200	N.D.	Hexachloroethane	200	N.D.
Benzyl alcohol	200	N.D.	Indeno(1,2,3-cd)pyrene	200	N.D.
Bis(2-chloroethoxy)methane	100	N.D.	Isophorone	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.	2-Methylnaphthalene	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.	2-Methylphenol	150	N.D.
Bis(2-ethylhexyl)phthalate	1,000	N.D.	4-Methylphenol	150	N.D.
4-Bromophenyl phenyl ether	150	N.D.	Naphthalene	150	N.D.
Butyl benzyl phthalate	500	N.D.	2-Nitroaniline	200	N.D.
4-Chloroaniline	100	N.D.	3-Nitroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.	4-Nitroaniline	500	N.D.
4-Chloro-3-methylphenol	100	N.D.	Nitrobenzene	500	N.D.
2-Chlorophenol	250	N.D.	2-Nitrophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.	4-Nitrophenol	500	N.D.
Chrysene	100	N.D.	N-Nitrosodiphenylamine	200	N.D.
Dibenz(a,h)anthracene	250	N.D.	N-Nitroso-di-N-propylamine	150	N.D.
Dibenzofuran	100	N.D.	Pentachlorophenol	500	N.D.
Di-N-butyl phthalate	250	N.D.	Phenanthrene	100	N.D.
1,3-Dichlorobenzene	100	N.D.	Phenol	150	N.D.
1,4-Dichlorobenzene	100	N.D.	Pyrene	150	N.D.
1,2-Dichlorobenzene	100	N.D.	1,2,4-Trichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.	2,4,5-Trichlorophenol	150	N.D.
2,4-Dichlorophenol	100	N.D.	2,4,6-Trichlorophenol	150	N.D.
Diethyl phthalate	100	N.D.			
2,4-Dimethylphenol	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-121)	49%
Phenol-d6 (24-113)	60%
2,4,6-Tribromophenol (19-122)	59%
Nitrobenzene-d5 (23-120)	51%
2-Fluorobiphenyl (30-115)	57%
Terphenyl-d14 (18-137)	68%

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Method Blank

Extracted: Jul 14, 1998
Analyzed: Jul 16, 1998
Reported: Jul 16, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 3550/8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene	100	N.D.	Dimethyl phthalate	100	N.D.
Acenaphthylene	100	N.D.	4,6-Dinitro-2-methylphenol	250	N.D.
Aniline	150	N.D.	2,4-Dinitrophenol	250	N.D.
Anthracene	100	N.D.	2,4-Dinitrotoluene	100	N.D.
Azobenzene	150	N.D.	2,6-Dinitrotoluene	100	N.D.
Benzidine	1,000	N.D.	Di-N-octyl phthalate	500	N.D.
Benzoic Acid	500	N.D.	Fluoranthene	100	N.D.
Benz(a)anthracene	100	N.D.	Fluorene	100	N.D.
Benzo(b)fluoranthene	200	N.D.	Hexachlorobenzene	100	N.D.
Benzo(k)fluoranthene	200	N.D.	Hexachlorobutadiene	100	N.D.
Benzo(g,h,i)perylene	150	N.D.	Hexachlorocyclopentadiene	500	N.D.
Benzo(a)pyrene	200	N.D.	Hexachloroethane	200	N.D.
Benzyl alcohol	200	N.D.	Indeno(1,2,3-cd)pyrene	200	N.D.
Bis(2-chloroethoxy)methane	100	N.D.	Isophorone	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.	2-Methylnaphthalene	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.	2-Methylphenol	150	N.D.
Bis(2-ethylhexyl)phthalate	1,000	N.D.	4-Methylphenol	150	N.D.
4-Bromophenyl phenyl ether	150	N.D.	Naphthalene	150	N.D.
Butyl benzyl phthalate	500	N.D.	2-Nitroaniline	200	N.D.
4-Chloroaniline	100	N.D.	3-Nitroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.	4-Nitroaniline	500	N.D.
4-Chloro-3-methylphenol	100	N.D.	Nitrobenzene	500	N.D.
2-Chlorophenol	250	N.D.	2-Nitrophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.	4-Nitrophenol	500	N.D.
Chrysene	100	N.D.	N-Nitrosodiphenylamine	200	N.D.
Dibenz(a,h)anthracene	250	N.D.	N-Nitroso-di-N-propylamine	150	N.D.
Dibenzofuran	100	N.D.	Pentachlorophenol	500	N.D.
Di-N-butyl phthalate	250	N.D.	Phenanthrene	100	N.D.
1,3-Dichlorobenzene	100	N.D.	Phenol	150	N.D.
1,4-Dichlorobenzene	100	N.D.	Pyrene	150	N.D.
1,2-Dichlorobenzene	100	N.D.	1,2,4-Trichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.	2,4,5-Trichlorophenol	150	N.D.
2,4-Dichlorophenol	100	N.D.	2,4,6-Trichlorophenol	150	N.D.
Diethyl phthalate	100	N.D.			
2,4-Dimethylphenol	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-121)	49%
Phenol-d6 (24-113)	57%
2,4,6-Tribromophenol (19-122)	65%
Nitrobenzene-d5 (23-120)	46%
2-Fluorobiphenyl (30-115)	57%
Terphenyl-d14 (18-137)	84%

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Client Project ID: S9508

Sample Descript: Soil, Soil/Sand Well #3
Lab Number: HG01501

Sampled: Jul 13, 1998
Received: Jul 13, 1998
Extracted: Jul 14, 1998
Analyzed: Jul 14, 1998
Reported: Jul 15, 1998

CALIFORNIA CODE OF REGULATIONS, TITLE 22 METALS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)		TTLC Sample Result mg/Kg (ppm)
Antimony	6010	15	500	10	.....	11
Arsenic	6010	5.0	500	2.0	.....	6.2
Barium	6010	100	10000	1.0	.....	5.2
Beryllium	6010	0.75	75	0.50	.....	N.D.
Cadmium	6010	1.0	100	0.50	.....	2.5
Chromium, total	6010	5.0	2500	1.0	.....	97
Cobalt	6010	80	8000	1.0	.....	12
Copper	6010	25	2500	1.0	.....	300
Lead	6010	5.0	1000	2.0	.....	6.3
Mercury	7471	0.20	20	0.020	.....	0.025
Molybdenum	6010	350	3500	2.0	.....	15
Nickel	6010	20	2000	1.0	.....	190
Selenium	6010	1.0	100	2.0	.....	N.D.
Silver	6010	5.0	500	1.0	.....	N.D.
Thallium	6010	7.0	700	10	.....	N.D.
Vanadium	6010	24	2400	1.0	.....	1.1
Zinc	6010	250	5000	5.0	.....	24

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Method Blank

Extracted: Jul 14, 1998
Analyzed: Jul 14, 1998
Reported: Jul 15, 1998

CALIFORNIA CODE OF REGULATIONS, TITLE 22 METALS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)		TTLC Sample Result mg/Kg (ppm)
Antimony	6010	15	500	10	.....	N.D.
Arsenic	6010	5.0	500	2.0	.....	N.D.
Barium	6010	100	10000	1.0	.....	N.D.
Beryllium	6010	0.75	75	0.50	.....	N.D.
Cadmium	6010	1.0	100	0.50	.....	N.D.
Chromium, total	6010	5.0	2500	1.0	.....	N.D.
Cobalt	6010	80	8000	1.0	.....	N.D.
Copper	6010	25	2500	1.0	.....	N.D.
Lead	6010	5.0	1000	2.0	.....	N.D.
Mercury	7471	0.20	20	0.020	.....	N.D.
Molybdenum	6010	350	3500	2.0	.....	N.D.
Nickel	6010	20	2000	1.0	.....	N.D.
Selenium	6010	1.0	100	2.0	.....	N.D.
Silver	6010	5.0	500	1.0	.....	N.D.
Thallium	6010	7.0	700	10	.....	N.D.
Vanadium	6010	24	2400	1.0	.....	N.D.
Zinc	6010	250	5000	5.0	.....	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Client Project ID: S9508

Sample Descript: Soil
First Sample #: HG01501

Sampled:	Jul 13, 1998
Received:	Jul 13, 1998
Extracted:	Jul 15, 1998
Analyzed:	Jul 15, 1998
Reported:	Jul 15, 1998

CHROMIUM VI (EPA 7196)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)
HG01501	Soil/Sand Well #3	0.50	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA 91606
Attention: R. Slade

Method Blank

Extracted: Jul 15, 1998
Analyzed: Jul 15, 1998
Reported: Jul 15, 1998

CHROMIUM VI (EPA 7196)

Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)
Method Blank	0.50	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
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North Hollywood, CA 91606
Attention: R. Slade

Client Project ID: S9508
Sample Descript: Soil
First Sample #: HG01501

Sampled:	Jul 13, 1998
Received:	Jul 13, 1998
Extracted:	Jul 13, 1998
Analyzed:	Jul 13, 1998
Reported:	Jul 15, 1998

pH (EPA 9045)

Laboratory Number	Sample Description	Reporting Limit pH units	Sample Result pH units
HG01501	Soil/Sand Well #3	N.A.	9.7

DEL MAR ANALYTICAL (ELAP #1855)

Patty Mata
Project Manager

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA
Attention: R. Slade

Client Project ID: S9508

Sample Descript: STLC Extract of a Soil, Soil/Sand Well #3
Lab Number: HG01867

Sampled: Jul 13, 1998
Received: Jul 13, 1998
Extracted: Jul 18, 1998
Analyzed: Jul 21, 1998
Reported: Jul 21, 1998

LABORATORY ANALYSIS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/L (ppm)		STLC Sample Result mg/L (ppm)
Chromium, total.....	6010	5.0	2500	0.10	.....	N.D.
Copper.....	6010	25	2500	0.10	.....	1.0
Nickel.....	6010	20	2000	0.10	.....	0.29

Prior to analysis, the sample was extracted using the WET method as described in California Title 22, Section 66261, Appendix II.
Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon
North Hollywood, CA
Attention: R. Slade

Method Blank

Extracted: Jul 18, 1998
Analyzed: Jul 21, 1998
Reported: Jul 21, 1998

LABORATORY ANALYSIS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/L (ppm)		STLC Sample Result mg/L (ppm)
Chromium, total.....	6010	5.0	2500	0.10	.....	N.D.
Copper.....	6010	25	2500	0.10	.....	N.D.
Nickel.....	6010	20	2000	0.10	.....	N.D.

Prior to analysis, the sample was extracted using the WET method as described in California Title 22, Section 66261, Appendix II.
Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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MS/MSD DATA REPORT

METHOD: METALS
Instrument: ICP
Matrix: Soil

Date Analyzed: 7/21/98

Sample: HG01223

Batch: HG18SL2S(A)

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Chromium	0.140	2.0	2.14	2.22	100%	104%	3.67%	102%	20	80-120
Copper	0	2.0	2.37	2.46	119%	123%	3.73%	121%	20	80-120
Lead *	27.2	2.0	30.1	28.4	145%	60%	5.81%	103%	20	80-120
Nickel	0.364	2.0	2.45	2.32	104%	98%	5.45%	101%	20	80-120

* Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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ADDITIONAL ANALYSIS REQUEST FORM

Today's Date: 7/16/98 Del Mar Analytical Project Manager: PM

Request via: X telephone ____ chain of custody form ____ fax transmission ____ E-mail ____ other

Client: RCS Contact: R. Slade

Project: S9508

Date Sampled: 7/13/98 Date Received: 7/13/98

Status: X in progress ____ completed ____ received today ____ received yesterday ____ on hold ____ other

SAMPLE NUMBER	SAMPLE DESCRIPTION	ANALYSIS REQUESTED	SPECIAL REQUIREMENTS
HG01501	Soil/Sand Wall #3	STLC Cr ↓ Cu Ni	

TURNAROUND STATUS: ____Same Day ____24hr ____48hr X 3days

____5days ____Standard ____No Rush Charge

g:\dmai\misc\forms\add-req.doc

Del Mar Analytical

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MS/MSD DATA REPORT

EPA METHOD: 7471
Matrix: Soil

Date Analyzed: 7/14/98

Sample: HG01437

Batch: HG14HG1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Mercury	0.028	0.80	0.812	0.783	98%	94%	3.6%	96%	20	80-120

Definition of Terms:

R1..... Result of Sample Analysis

Sp..... Spike Concentration Added to Sample

MS..... Matrix Spike Result

MSD..... Matrix Spike Duplicate Result

PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100

PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100

RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100

Acceptance Limits..... Statistically determined on an annual basis.

Del Mar Analytical

Del Mar Analytical

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MS/MSD DATA REPORT

EPA METHOD: 8260
Matrix: Soil

Date Analyzed: 7/14/98

Sample: HG01438

Batch: HG14071S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Vinyl Chloride	0	25	22	21	88%	84%	4.7%	86%	30	30-160
1,1-Dichloroethene	0	25	25	24	100%	96%	4.1%	98%	40	45-165
MTBE	0	25	25	24	100%	96%	4.1%	98%	40	55-155
1,1-Dichlororethane	0	25	24	24	96%	96%	0.0%	96%	20	55-150
Chloroform	0	25	24	23	96%	92%	4.3%	94%	20	65-140
1,2-Dichlororethane	0.2	25	22	21	87%	83%	4.7%	85%	30	55-145
Benzene	0	25	23	23	92%	92%	0.0%	92%	25	60-140
Trichloroethene	0	25	25	24	100%	96%	4.1%	98%	30	60-145
Toluene	0	25	24	23	96%	92%	4.3%	94%	20	65-140
Tetrachloroethene	0	25	24	23	96%	92%	4.3%	94%	50	10-200
Chlorobenzene	0	25	24	23	96%	92%	4.3%	94%	20	70-135
Ethylbenzene	0	25	24	23	96%	92%	4.3%	94%	20	70-140
m,p-Xylenes	0	50	48	47	96%	94%	2.1%	95%	20	40-160
o-Xylene	0	25	24	24	96%	96%	0.0%	96%	20	65-150

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34(

MS/MSD DATA REPORT

EPA METHOD: 7196A
Matrix: Soil

Date Analyzed: 7/15/98

Sample: HG01501

Batch: HG15C61S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Chromium VI	0	3.33	0.295	0.259	9%	8%	0.0%	8%	20	80-120

* The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

LCS DATA REPORT

EPA METHOD: 7196A

Date Analyzed: 7/10/98

Batch: HG10C61S

Analyte	St	R1	PR	Acceptance Limits
	ppm	ppm	%	%
Chromium VI	3.0	2.4	80%	80-120

Definition of Terms:

St. ..... Concentration of standard added to blank.

R1 ..... Standard Result

PR ..... Percent Recovery of R1; (R1 / St) X 100

Acceptance Limits. ..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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MS/MSD DATA REPORT

METHOD: METALS
Instrument: ICP
Matrix: Soil

Date Analyzed: 7/14/98

Sample: HG01510

Batch: HG14ME1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Antimony *	0	50	26.0	25.4	52%	51%	2.33%	51%	20	80-120
Arsenic	2.07	50	46.9	46.3	90%	88%	1.29%	89%	20	80-120
Barium	61.2	50	108	107	94%	92%	0.930%	93%	20	80-120
Beryllium	0	50	42.8	42.0	86%	84%	1.89%	85%	20	80-120
Cadmium	0	50	46.5	45.8	93%	92%	1.52%	92%	20	80-120
Chromium	20.5	50	80.0	78.7	119%	116%	1.64%	118%	20	80-120
Coablt	7.84	50	54.5	53.8	93%	92%	1.29%	93%	20	80-120
Copper	12.1	50	57.7	56.8	91%	89%	1.57%	90%	20	80-120
Lead	43.4	50	97.9	96.5	109%	106%	1.44%	108%	20	80-120
Molybdenum	0	50	45.3	44.9	91%	90%	0.887%	90%	20	80-120
Nickel	20.2	50	70.2	69.1	100%	98%	1.58%	99%	20	80-120
Selenium *	0	50	38.4	37.9	77%	76%	1.31%	76%	20	80-120
Silver	0	50	9.14	8.92	18%	18%	2.44%	18%	20	80-120
Thallium *	0	50	39.4	39.3	79%	79%	0.254%	79%	20	80-120
Vanadium	31.4	50	76.7	75.6	91%	88%	1.44%	90%	20	80-120
Zinc	70.4	50	117	115	93%	89%	1.72%	91%	20	80-120

* The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

LCS DATA REPORT

METHOD: METALS
Instrument: ICP

Date Analyzed: 7/14/98

Batch: HG14ME1S

Analyte	St	R1	PR	Acceptance Limits
	ppm	ppm	%	%
Antimony	50	51.4	103%	80-120
Selenium	50	44.8	90%	80-120
Thallium	50	44.2	88%	80-120

Definition of Terms:

St. ..... Concentration of standard added to blank.

R1 ..... Standard Result

PR ..... Percent Recovery of R1; (R1 / St) X 100

Acceptance Limits. ..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

MS/MSD DATA REPORT

EPA METHOD: 8270
Matrix: Soil

Date Analyzed: 7/16/98

Sample: HG01445

Batch: HG14SE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Phenol *	0	50	35	23	70%	46%	41%	58%	35	10-112
2-Chlorophenol *	0	50	34	19	68%	38%	57%	53%	50	23-134
1,4-Dichlorobenzene *	0	50	32	12	64%	24%	91%	44%	27	20-124
N-Nitroso-di-n-propylamine *	0.1	50	34	23	68%	46%	39%	57%	38	41-126
1,2,4-Trichlorobenzene *	0	50	30	16	60%	32%	61%	46%	38	44-142
4-Chloro-3-methylphenol	0	50	36	31	72%	62%	15%	67%	33	22-147
Acenaphthene *	0.1	50	35	28	70%	56%	22%	63%	19	47-145
2,4-Dinitrotoluene	0	50	39	35	78%	70%	11%	74%	47	39-139
4-Nitrophenol	0	50	38	35	76%	70%	8.2%	73%	50	10-132
Pentachlorophenol	0	50	32	29	64%	58%	9.8%	61%	47	17-109
Pyrene	0.1	50	46	46	92%	92%	0.0%	92%	36	52-115

* The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

LCS DATA REPORT

EPA METHOD: 8270

Date: 7/16/98

Batch: HG14SE1S

Analyte	St	R1	PR	Acceptance Limits
	ppb	ppb	%	%
Phenol	50	36	72%	10-112
2-Chlorophenol	50	35	70%	23-134
1,4-Dichlorobenzene	50	28	56%	20-124
N-Nitroso-di-n-propylamine	50	35	70%	41-126
1,2,4-Trichlorobenzene	50	30	60%	44-142
4-Chloro-3-methylphenol	50	39	78%	22-147
Acenaphthene	50	37	74%	47-145
2,4-Dinitrotoluene	50	45	90%	39-139
4-Nitrophenol	50	42	84%	10-132
Pentachlorophenol	50	36	72%	17-109
Pyrene	50	46	92%	52-115

Definition of Terms:

St. . . . . Concentration of standard added to blank.

R1 . . . . . Standard Result

PR . . . . . Percent Recovery of R1; (R1 / St) X 100

DEL MAR ANALYTICAL

Del Mar Analytical
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16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1336
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689

1652

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:
R.C. Slade & Assoc
6442 Coldwater
North Hollywood, CA

Project/PO Number:
S 9508

Project Manager:
R. Slade

Phone Number:
(818) 506-0448

Sampler:
B. LaRosse

Fax Number:
(818) 506-1343

Analysis Required: EPA 8270 | EPA 8260 | pH | TTLC Cam Metals | CCR

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	8270	8260	pH	TTLC Cam Metals	CCR
Soil/Sand	Soil	Glass	3	7/13/98 01:33pm	None	✓	✓	✓	✓	✓
Well No. 3										
Abundant										
Caving Soils										
in Sampler.										

Special Instructio.
PH RESULT =
9.72
7/13/98
M.

Relinquished By:	Date /Time: 7/13/98 2:47	Received by:	Date /Time: 7/13/98 247
Relinquished By:	Date /Time: 7/13/98 1540	Received by:	Date /Time: 7/13/98 1540
Relinquished By:	Date /Time: 7/13/98 1825	Received in Lab by:	Date /Time: 7-13-98 18:25

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours 1 ✓ normal ____

Sample Integrity: (Check)
intact ✓ on ice ✓

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses [illegible] due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

BOE-C6-0134605

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
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2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1336
Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689

1F126

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:
P.C. Slade & Assoc.
6442 Colquechar
Ste R Hollywood, CA

Project/PO Number:
S 9508

Project Manager:
C. Slade

Phone Number:
(818) 506-0418

Sampler:
C. Labonte

Fax Number:
(818) 506-1343

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required: EPA 8270	EPA 8260	Soil	TLC Cons Metals	C-6+	Special Instructions
Soil Sand	Soil	Glass	3	7/13/98 01:33pm	None	✓	✓	✓	✓	✓	PH RESULT = 9.72 7/13/98 MARC
Well No.3											
Abundant											
Caving Soils											
in Sampler.											

Relinquished By: [signature] Date/Time: 7/13/98 2:47pm Received by: [signature] Date/Time: 7/13/98 247

Relinquished By: [signature] Date/Time: 7/13/98 1540 Received by: [signature] Date/Time: 7/13/98 1540

Relinquished By: [signature] Date/Time: 7/13/98 1825 Received in Lab by: [signature] Date/Time: 7-13-98 18:25

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours 1 normal ____

Sample Integrity: (Check)
intact ✓ on ice ✓

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

BOE-C6-013460G

RESULTS OF LABORATORY ANALYSIS
WELL NO. 2

Del Mar Analytical

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-968
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-133

R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Client Project ID: RCS
Sample Descript: Soil, Well No. 2 Bottom Sediment
Lab Number: HG03023
QC Batch: HG25091S

Sampled: Jul 24, 1998
Received: Jul 24, 1998
Extracted: Jul 25, 1998
Analyzed: Jul 25, 1998
Reported: Jul 29, 1998

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	95%
Toluene-d8 (81-117)	104%
4-Bromofluorobenzene (74-121)	99%

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Method Blank

QC Batch: HG25091S

Extracted: Jul 25, 1998
Analyzed: Jul 25, 1998
Reported: Jul 29, 1998

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	102%
Toluene-d8 (81-117)	103%
4-Bromofluorobenzene (74-121)	101%

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Client Project ID: RCS
Sample Descript: Soil, Well No. 2 Bottom Sediment
Lab Number: HG03023
QC Batch: HG24SE1S

Sampled: Jul 24, 1998
Received: Jul 24, 1998
Extracted: Jul 24, 1998
Analyzed: Jul 29, 1998
Reported: Jul 29, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 3550/8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene	100	N.D.	Dimethyl phthalate	100	N.D.
Acenaphthylene	100	N.D.	4,6-Dinitro-2-methylphenol	250	N.D.
Aniline	150	N.D.	2,4-Dinitrophenol	250	N.D.
Anthracene	100	N.D.	2,4-Dinitrotoluene	100	N.D.
Azobenzene	150	N.D.	2,6-Dinitrotoluene	100	N.D.
Benzidine	1,000	N.D.	Di-N-octyl phthalate	500	N.D.
Benzoic Acid	500	N.D.	Fluoranthene	100	N.D.
Benz(a)anthracene	100	N.D.	Fluorene	100	N.D.
Benzo(b)fluoranthene	200	N.D.	Hexachlorobenzene	100	N.D.
Benzo(k)fluoranthene	200	N.D.	Hexachlorobutadiene	100	N.D.
Benzo(g,h,i)perylene	150	N.D.	Hexachlorocyclopentadiene	500	N.D.
Benzo(a)pyrene	200	N.D.	Hexachloroethane	200	N.D.
Benzyl alcohol	200	N.D.	Indeno(1,2,3-cd)pyrene	200	N.D.
Bis(2-chloroethoxy)methane	100	N.D.	Isophorone	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.	2-Methylnaphthalene	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.	2-Methylphenol	150	N.D.
Bis(2-ethylhexyl)phthalate	1,000	N.D.	4-Methylphenol	150	N.D.
4-Bromophenyl phenyl ether	150	N.D.	Naphthalene	150	N.D.
Butyl benzyl phthalate	500	N.D.	2-Nitroaniline	200	N.D.
4-Chloroaniline	100	N.D.	3-Nitroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.	4-Nitroaniline	500	N.D.
4-Chloro-3-methylphenol	100	N.D.	Nitrobenzene	500	N.D.
2-Chlorophenol	250	N.D.	2-Nitrophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.	4-Nitrophenol	500	N.D.
Chrysene	100	N.D.	N-Nitrosodiphenylamine	200	N.D.
Dibenz(a,h)anthracene	250	N.D.	N-Nitroso-di-N-propylamine	150	N.D.
Dibenzofuran	100	N.D.	Pentachlorophenol	500	N.D.
Di-N-butyl phthalate	250	N.D.	Phenanthrene	100	N.D.
1,3-Dichlorobenzene	100	N.D.	Phenol	150	N.D.
1,4-Dichlorobenzene	100	N.D.	Pyrene	150	N.D.
1,2-Dichlorobenzene	100	N.D.	1,2,4-Trichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.	2,4,5-Trichlorophenol	150	N.D.
2,4-Dichlorophenol	100	N.D.	2,4,6-Trichlorophenol	150	N.D.
Diethyl phthalate	100	N.D.			
2,4-Dimethylphenol	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-121)	58%
Phenol-d6 (24-113)	68%
2,4,6-Tribromophenol (19-122)	79%
Nitrobenzene-d5 (23-120)	61%
2-Fluorobiphenyl (30-115)	69%
Terphenyl-d14 (18-137)	90%

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Method Blank

QC Batch: HG24SE1S

Extracted: Jul 24, 1998
Analyzed: Jul 25, 1998
Reported: Jul 29, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 3550/8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene	100	N.D.	Dimethyl phthalate	100	N.D.
Acenaphthylene	100	N.D.	4,6-Dinitro-2-methylphenol	250	N.D.
Aniline	150	N.D.	2,4-Dinitrophenol	250	N.D.
Anthracene	100	N.D.	2,4-Dinitrotoluene	100	N.D.
Azobenzene	150	N.D.	2,6-Dinitrotoluene	100	N.D.
Benzidine	1,000	N.D.	Di-N-octyl phthalate	500	N.D.
Benzoic Acid	500	N.D.	Fluoranthene	100	N.D.
Benz(a)anthracene	100	N.D.	Fluorene	100	N.D.
Benzo(b)fluoranthene	200	N.D.	Hexachlorobenzene	100	N.D.
Benzo(k)fluoranthene	200	N.D.	Hexachlorobutadiene.	100	N.D.
Benzo(g,h,i)perylene	150	N.D.	Hexachlorocyclopentadiene.	500	N.D.
Benzo(a)pyrene	200	N.D.	Hexachloroethane	200	N.D.
Benzyl alcohol	200	N.D.	Indeno(1,2,3-cd)pyrene	200	N.D.
Bis(2-chloroethoxy)methane	100	N.D.	Isophorone	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.	2-Methylnaphthalene	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.	2-Methylphenol	150	N.D.
Bis(2-ethylhexyl)phthalate	1,000	N.D.	4-Methylphenol	150	N.D.
4-Bromophenyl phenyl ether	150	N.D.	Naphthalene	150	N.D.
Butyl benzyl phthalate	500	N.D.	2-Nitroaniline	200	N.D.
4-Chloroaniline	100	N.D.	3-Nitroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.	4-Nitroaniline	500	N.D.
4-Chloro-3-methylphenol	100	N.D.	Nitrobenzene	500	N.D.
2-Chlorophenol	250	N.D.	2-Nitrophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.	4-Nitrophenol	500	N.D.
Chrysene	100	N.D.	N-Nitrosodiphenylamine	200	N.D.
Dibenz(a,h)anthracene	250	N.D.	N-Nitroso-di-N-propylamine.	150	N.D.
Dibenzofuran	100	N.D.	Pentachlorophenol	500	N.D.
Di-N-butyl phthalate	250	N.D.	Phenanthrene	100	N.D.
1,3-Dichlorobenzene	100	N.D.	Phenol	150	N.D.
1,4-Dichlorobenzene	100	N.D.	Pyrene	150	N.D.
1,2-Dichlorobenzene	100	N.D.	1,2,4-Trichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.	2,4,5-Trichlorophenol	150	N.D.
2,4-Dichlorophenol	100	N.D.	2,4,6-Trichlorophenol	150	N.D.
Diethyl phthalate	100	N.D.			
2,4-Dimethylphenol	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-121)	58%
Phenol-d6 (24-113)	63%
2,4,6-Tribromophenol (19-122)	63%
Nitrobenzene-d5 (23-120)	58%
2-Fluorobiphenyl (30-115)	64%
Terphenyl-d14 (18-137)	90%

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-13

R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Client Project ID: RCS
Sample Descript: Soil, Well No. 2 Bottom Sediment
Lab Number: HG03023

Sampled: Jul 24, 1998
Received: Jul 24, 1998
Extracted: Jul 27-29, 1998
Analyzed: Jul 28-29, 1998
Reported: Jul 29, 1998

CALIFORNIA CODE OF REGULATIONS, TITLE 22 METALS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)		TTLC Sample Result mg/Kg (ppm)
Antimony	6010	15	500	10	.....	N.D.
Arsenic	6010	5.0	500	2.0	.....	8.9
Barium	6010	100	10000	1.0	.....	15
Beryllium	6010	0.75	75	0.50	.....	N.D.
Cadmium	6010	1.0	100	0.50	.....	1.5
Chromium, total	6010	5.0	2500	1.0	.....	11
Cobalt	6010	80	8000	1.0	.....	4.2
Copper	6010	25	2500	1.0	.....	89
Lead	6010	5.0	1000	2.0	.....	9.8
Mercury	7471	0.20	20	0.020	.....	N.D.
Molybdenum	6010	350	3500	2.0	.....	3.2
Nickel	6010	20	2000	1.0	.....	64
Selenium	6010	1.0	100	2.0	.....	N.D.
Silver	6010	5.0	500	1.0	.....	N.D.
Thallium	6010	7.0	700	10	.....	N.D.
Vanadium	6010	24	2400	1.0	.....	4.0
Zinc	6010	250	5000	5.0	.....	33

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

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R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Method Blank

Extracted: Jul 27-29, 1998
Analyzed: Jul 28-29, 1998
Reported: Jul 29, 1998

CALIFORNIA CODE OF REGULATIONS, TITLE 22 METALS

Analyte	EPA Method	STLC Max. Limit mg/L (ppm)	TTLC Max. Limit mg/Kg (ppm)	Reporting Limit mg/Kg (ppm)		TTLC Sample Result mg/Kg (ppm)
Antimony	6010	15	500	10	.....	N.D.
Arsenic	6010	5.0	500	2.0	.....	N.D.
Barium	6010	100	10000	1.0	.....	N.D.
Beryllium	6010	0.75	75	0.50	.....	N.D.
Cadmium	6010	1.0	100	0.50	.....	N.D.
Chromium, total	6010	5.0	2500	1.0	.....	N.D.
Cobalt	6010	80	8000	1.0	.....	N.D.
Copper	6010	25	2500	1.0	.....	N.D.
Lead	6010	5.0	1000	2.0	.....	N.D.
Mercury	7471	0.20	20	0.020	.....	N.D.
Molybdenum	6010	350	3500	2.0	.....	N.D.
Nickel	6010	20	2000	1.0	.....	N.D.
Selenium	6010	1.0	100	2.0	.....	N.D.
Silver	6010	5.0	500	1.0	.....	N.D.
Thallium	6010	7.0	700	10	.....	N.D.
Vanadium	6010	24	2400	1.0	.....	N.D.
Zinc	6010	250	5000	5.0	.....	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Ste. 214
North Hollywood, CA 91606
Attention: E. La Pensce

Client Project ID: RCS
Sample Descript: Soil
First Sample #: HG03832

Sampled:	Jul 24, 1998
Received:	Jul 24, 1998
Extracted:	Jul 31, 1998
Analyzed:	Jul 31, 1998
Reported:	Aug 4, 1998

CHROMIUM VI (EPA 7196)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)
HG03832	Well No. 2 Bottom Sediment	0.50	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Ste. 214
North Hollywood, CA 91606
Attention: E. La Pensce

Method Blank

Extracted: Jul 31, 1998
Analyzed: Jul 31, 1998
Reported: Aug 4, 1998

CHROMIUM VI (EPA 7196)

Laboratory Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)
Method Blank	0.50	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Patty Mata
Project Manager

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

MS/MSD DATA REPORT

EPA METHOD: 7196
Matrix: Soil

Date Analyzed: 7/31/98

Sample: HG03832

Batch: HG31C61S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Chromium VI	0	3.33	0	0	0%	0%	0%	0%	20	80-120

* The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

2852 [illegible]n Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-12
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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

LCS DATA REPORT

EPA METHOD: 7196

Date Analyzed: 7/31/98

Batch: HG31C61S

Analyte	St	R1	PR	Acceptance Limits
	ppm	ppm	%	%
Chromium VI	3.0	2.8	93%	80-120

Definition of Terms:

St. ..... Concentration of standard added to blank.

R1 ..... Standard Result

PR ..... Percent Recovery of R1; (R1 / St) X 100

Acceptance Limits. ... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical
1014 E. Cooley Dr., [illegible] A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1
16525 Sherman Way, Suite C Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1

ADDITIONAL ANALYSIS REQUEST FORM

Today's Date: 7/30/98 Del Mar Analytical Project Manager: RD for PM

Request via: X telephone ___ chain of custody form ___ fax transmission ___ E-mail ___ other

Client: C.C. SLADE & ASSOC. Contact: EARL

Project: RCS

Date Sampled: 7/24/98 Date Received: 7/24/98

Status: ___ in progress X completed ___ received today ___ received yesterday ___ on hold ___ other

SAMPLE NUMBER	SAMPLE DESCRIPTION	ANALYSIS REQUESTED	SPECIAL REQUIREMENTS
H603023	WELL No.2 BOTTOM SEDIMENT	CHROME 6+	

TURNAROUND STATUS: ___ Same Day ___ 24hr ___ 48hr X 3days

___ 5days ___ Standard ___ No Rush Charge

g:\dmai\misc\forms\add-req.doc

Del Mar Analytical
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689

1661

CHAIN OF CUSTODY FORM

Page 1 of _

Client Name/Address:
R. C. Slade & Associates
6442 Coldwater Cyn. Ave
Suite 214
North Hollywood, CA

Project/PO Number:

Project Manager:
E. LaPensee

Phone Number:
(818)506-0418

Sampler:
Pitto

Fax Number:
(818)506-1343

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	EPA Method 8260	EPA Method 8270	Cam (17) Metals	pH		CHROME 6+				Special Instructions
Well No. 2	Soil	Glass	2	7/24/98 @ 8:30am	None	X	X	X	X		✓				ADD-ON
Bottom Sediment															CHROME 6+
															ON 72 HR
															RUSH PER
															EARL 7/24
															- RD

Relinquished By:	Date /Time: 7/24/98 @ 9:55am	Received by:	Date /Time: 7/24/98 9:55 am
Relinquished By:	Date /Time: 7/24/98 10:15	Received by:	Date /Time: 7/24/98 10:15
Relinquished By:	Date /Time: 7/24/98 12:15	Received in Lab by:	Date /Time: 7/24 1215

Turnaround Time: (Check)
same day _____ 72 hours ✓
24 hours _____ 5 days _____
48 hours _____ normal _____

Sample Integrity: (Check)
intact ✓ on ice ✓

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

BOE-C6-0134619

Del Mar Analytical

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R. C. Slade & Associates
6442 Coldwater Canyon, Suite 214
North Hollywood, CA 91606
Attention: E. La Pensce

Client Project ID: RCS
Sample Descript: Soil
First Sample #: HG03023

Sampled: Jul 24, 1998
Received: Jul 24, 1998
Extracted: Jul 24, 1998
Analyzed: Jul 24, 1998
Reported: Jul 29, 1998

pH (EPA 9045)

Laboratory Number	Sample Description	Reporting Limit pH units	Sample Result pH units
HG03023	Well No. 2 Bottom Sediment	N.A.	9.1

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Del Mar Analytical

1014 E. Coole Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-104
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MS/MSD DATA REPORT

EPA METHOD: 8260
Matrix: Soil

Date Analyzed: 7/25/98

Sample: HG03109

Batch: HG25091S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Vinyl Chloride	0	25	31	28	124%	112%	10%	118%	30	30-160
1,1-Dichloroethene	0	25	28	28	112%	112%	0.0%	112%	40	45-165
MTBE	0.6	25	20	26	78%	102%	26%	90%	40	55-155
1,1-Dichlororethane	0	25	27	27	108%	108%	0.0%	108%	20	55-150
Chloroform	0.4	25	27	28	106%	110%	3.6%	108%	20	65-140
1,2-Dichlororethane	0	25	23	25	92%	100%	8.3%	96%	30	55-145
Benzene	0	25	26	26	104%	104%	0.0%	104%	25	60-140
Trichloroethene	0	25	28	27	112%	108%	3.6%	110%	30	60-145
Toluene	0	25	27	26	108%	104%	3.8%	106%	20	65-140
Tetrachloroethene	0	25	29	28	116%	112%	3.5%	114%	50	10-200
Chlorobenzene	0	25	26	26	104%	104%	0.0%	104%	20	70-135
Ethylbenzene	0	25	27	26	108%	104%	3.8%	106%	20	70-140
m,p-Xylenes	0	50	53	51	106%	102%	3.8%	104%	20	40-160
o-Xylene	0	25	27	26	108%	104%	3.8%	106%	20	65-150

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

2[illegible]ilton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-122[illegible]
1014 E. Cooley Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-104[illegible]
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-184[illegible]
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-968[illegible]
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-133[illegible]

MS/MSD DATA REPORT

EPA METHOD: 7471
Matrix: Soil

Date Analyzed: 7/29/98

Sample: HG03380

Batch: HG29HG1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Mercury	0	0.80	0.748	0.746	94%	93%	0.3%	93%	20	80-120

Definition of Terms:

R1..... Result of Sample Analysis

Sp..... Spike Concentration Added to Sample

MS..... Matrix Spike Result

MSD..... Matrix Spike Duplicate Result

PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100

PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100

RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100

Acceptance Limits..... Statistically determined on an annual basis.

Del Mar Analytical

Del Mar Analytical

1014 E. Cooley Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-104
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-184
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-968
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-133

MS/MSD DATA REPORT

EPA METHOD: 8270
Matrix: Soil

Date Analyzed: 7/25/98

Sample: HG02446

Batch: HG24SE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Phenol *	0	50	0	2	0%	4%	200%	2%	35	10-112
2-Chlorophenol *	0	50	2	1	4%	2%	67%	3%	50	23-134
1,4-Dichlorobenzene *	0	50	1	1	2%	2%	0%	2%	27	20-124
N-Nitroso-di-n-propylamine *	0.4	50	2	1	3%	1%	67%	2%	38	41-126
1,2,4-Trichlorobenzene *	0	50	1	1	2%	2%	0%	2%	38	44-142
4-Chloro-3-methylphenol *	0	50	1	1	2%	2%	0%	2%	33	22-147
Acenaphthene *	0.1	50	1	1	2%	2%	0%	2%	19	47-145
2,4-Dinitrotoluene *	0	50	1	1	2%	2%	0%	2%	47	39-139
4-Nitrophenol *	0.2	50	0	0	0%	0%	NA	0%	50	10-132
Pentachlorophenol *	0	50	0	0	0%	0%	NA	0%	47	17-109
Pyrene *	0.1	50	2	2	4%	4%	0.0%	4%	36	52-115

* The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

2[illegible]ation Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-122
1014 E. Cooley Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-104
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-184
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-968
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-133

LCS DATA REPORT

EPA METHOD: 8270

Date: 7/25/98

Batch: HG24SE1S

Analyte	St	R1	PR	Acceptance Limits
	ppb	ppb	%	%
Phenol	50	34	68%	10-112
2-Chlorophenol	50	35	70%	23-134
1,4-Dichlorobenzene	50	30	60%	20-124
N-Nitroso-di-n-propylamine	50	40	80%	41-126
1,2,4-Trichlorobenzene	50	32	64%	44-142
4-Chloro-3-methylphenol	50	39	78%	22-147
Acenaphthene	50	38	76%	47-145
2,4-Dinitrotoluene	50	39	78%	39-139
4-Nitrophenol	50	39	78%	10-132
Pentachlorophenol	50	33	66%	17-109
Pyrene	50	49	98%	52-115

Definition of Terms:

St ..... **Concentration of standard added to blank.**

R1 ..... **Standard Result**

PR ..... **Percent Recovery of R1; (R1 / St) X 100**

DEL MAR ANALYTICAL

Del Mar Analytical

2852 n Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1
1014 E. Cooley D. ite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3

MS/MSD DATA REPORT

METHOD: METALS
Instrument: ICP
Matrix: Soil

Date Analyzed: 7/28/98

Sample: HG03229

Batch: HG27ME1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	%	RPD	MPR
Antimony	3.23	50	45.0	45.7	84%	85%	1.5%	84%	20	80-120
Arsenic	2.82	50	46.6	46.3	88%	87%	0.65%	87%	20	80-120
Barium	160	50	218	222	116%	124%	1.8%	120%	20	80-120
Beryllium	0	50	45.0	45.4	90%	91%	0.88%	90%	20	80-120
Cadmium	1.0	50	47.8	48.5	94%	95%	1.5%	94%	20	80-120
Chromium	22.0	50	80.0	81.2	116%	118%	1.5%	117%	20	80-120
Cobalt	9.13	50	59.2	60.1	100%	102%	1.5%	101%	20	80-120
Copper	16.0	50	67.9	69.4	104%	107%	2.2%	105%	20	80-120
Lead	5.44	50	51.6	52.1	92%	93%	0.96%	93%	20	80-120
Molybdenum	1.58	50	46.6	47.2	90%	91%	1.3%	91%	20	80-120
Nickel	34.0	50	86.5	87.6	105%	107%	1.3%	106%	20	80-120
Selenium *	0	50	36.7	37.8	73%	76%	3.0%	75%	20	80-120
Silver	0	10	8.97	9.23	90%	92%	2.9%	91%	20	80-120
Thallium *	0	50	38.6	39.1	77%	78%	1.3%	78%	20	80-120
Vanadium *	42.0	50	110	112	136%	140%	1.8%	138%	20	80-120
Zinc	52.0	50	108	110	113%	116%	1.6%	114%	20	80-120

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical

2852 n Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-12
1014 E. Cooley D. ite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-10
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-18
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-34

LCS DATA REPORT

METHOD: METALS
Instrument: ICP

Date Analyzed: 7/28/98

Batch: HG27ME1S

Analyte	St	R1	PR	Acceptance Limits
	ppm	ppm	%	%
Selenium	50	47.9	96%	80-120
Thallium	50	45.7	91%	80-120
Vanadium	50	46.2	92%	80-120

Definition of Terms:

St..... ..... Concentration of standard added to blank.

R1..... ..... Standard Result

PR..... ..... Percent Recovery of R1; (R1 / St) X 100

Acceptance Limits.... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
2465 W 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1336
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689

1660

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:
R.C. Slade & Associates
6442 Coldwater Cyn. Ave
Suite 214
North Hollywood, CA

Project/PO Number:

Project Manager:
E. LaPensee

Phone Number:
(818)506-0418

Sampler:
D. Pitts

Fax Number:
(818)506-1343

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	EPA Method 8260	EPA Method 8270	Cont (TTLC) Metals	pH							Special Instructions
Well No. 2	Soil	Glass	2	7/24/98 @ 30cm	None	X	X	X	X							
Bottom Sediment																

Relinquished By: [signature] Date /Time: 7/24/98 @ 9:55am
Received by: [signature] Date /Time: 7/24/98 9:55 am

Relinquished By: [signature] Date /Time: 7/24/98 10:15
Received by: [signature] Date /Time: 7/24/98 10:15

Relinquished By: [signature] Date /Time: 7/24/98 12:15
Received in Lab by: [signature] Date /Time: 7/24 1215

Turnaround Time: (Check)
same day ____ 72 hours ✓
24 hours ____ 5 days ____
48 hours ____ normal ____

Sample Integrity: (Check)
intact ✓ on ice ✓

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

BOE-C6-0134627

APPENDIX 5
CEMENT DELIVERY TICKETS

OPEN 7 DAYS
P.O. BOX 33140, RIVERSIDE, CA 92519
PHONE (909) 685-2200

CONTROL NUMBER 413446

* I D I C 4 L 3 U 4 6 *

#1 RIVERSIDE - 8830 VAN BUREN BLVD.
#2 MORENO VALLEY - 12690 DAY STREET
#3 REDLANDS - 8353 ALABAMA
#4 FONTANA - 13792 SLOVER
#5 POMONA - 2470 POMONA BLVD.
#6 HEMET/SAN JACINTO - 1675 STATE STREET
#7 BEAUMONT - 452 FIFTH PLACE
#8 SUN CITY - 27050 WATSON ROAD
#9 ARROWHEAD - 29750 HWY 18
#10 SANTA FE SPRINGS - 12311 GREENSTONE AVENUE
#11 CABAZON - 83990 APACHE TRAIL
#12 ANAHEIM HILLS - 6400 SANTA ANA CANYON RD.
#13 IRWINDALE - 13631 LIVE OAK LANE
#14 PASADENA - 1420 N. LINCOLN AVENUE
#15 VERNON/LOS ANGELES - 3365 E. 26TH STREET
#16 ANAHEIM - 201 E. COMMERCIAL
#17 SANTA ANA - 810 N. TOWNSEND
#18 LAKE FOREST - 29531 TOWN CENTRE
#19 ADELANTO - 12203 VIOLET RD.
#20 SAN CLEMENTE - 116 RINCON CT.
#21 IRVINE - 16081 CONSTRUCTION CIR. WEST

PLANT	DATE	CUSTOMER NO.	SOLD TO	MAP PAGE	TICKET NO.
10	08/13/98	53680	BEYLIK DRILLING INC	764A2	41344(

TX CD — DELIVERY ADDRESS & INSTRUCTIONS — CUSTOMER P.O. / JOB OR LOT #

190TH/NORMANDIE — DEAN — 05-8007 — 05-8007
BOEING PLANT — TORRANCE — (562)691-0903 LAST TKS
Job Phone :

CPU NO.	METER READING	TIME TYPED	TRUCK LIC NO.
147	1000.00	12:12	5B93070

LOAD NO.	SLUMP	TRUCK	DRIVER	
1	6.00	542	1076	MACLEAN NEIL SLURRY

JOB START : 12:00

TO JOB 1229
ON JOB 1318
START POUR 1321
FINISH POUR 1329
LEAVE JOB
ARRIVE PLANT

DRUM REVS.

Job-site Cylinder Test: ☐ Yes

Water added on job at Customer's request:
_____ gals to Full Ld.
_____ gals to 2/3 Ld.
_____ gals to 1/3 Ld.
_____ ADJ. Meter

Additional water added to this concrete will reduce its strength. Any water added is at customer's own risk.

TIME ON JOB _____ MIN. CHECK # _____
STAND BY _____ MIN. CHECK ☐ _____ AMOUNT _____ BY _____
☐ Yes RATE OF X $ _____ PER MIN. CASH ☐ _____ AMOUNT _____ BY _____
☐ Yes
☐ Yes $ _____ OVERTIME CHARGE
PLANT MGR SIG _____

4 MIN — 4 min. per yd. free unloading time allowed. Additional unloading time charged at current hourly truck rate.

UNLOADING RELEASE

In consideration of Robertson's (Material Dealer) delivering this purchased material to a place designated by the undersigned, the undersigned hereby releases and agrees to indemnify and hold harmless said Material Dealer, their Agents, employees and drivers from all liability or claims for damage done by it, or them, to all real and personal property at the location indicated hereon as a result of the movement of said Material Dealer's vehicles or employees upon or about such property.

This release is intended to, and does cover all movements of all vehicles of said Material Dealer at the location indicated hereon, from the time such vehicles leave the curb line to enter upon the property described hereon until they return to such curb line, regardless of the number and/or dates of such deliveries or movements.

In event of default in payment of this ticket and it is necessary for seller to retain the services of an attorney by reason thereof, the buyer agrees to pay seller all costs and expenses incurred by reason thereof, including a reasonable attorney's fee plus 1½% interest per month.

LOAD QUANTITY	CUMULATIVE QUANTITY	ORDERED QUANTITY	PRODUCT CODE	MIX AND COMMODITY DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	AMOUNT
3.50	3.50	3.50	RC940P13	10.0SK SLURRY	CY		

Well No. 3
Casing Cement
E.T.L.

LOAD WEIGHT SSD:

DEL. CHARGE

WEIGHTMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

ROBERTSON'S WEIGHMASTER
Dave Gallas

BY DEPUTY

TAX
PREVIOUS BALANCE
SUB TOTAL
STAND BY CHARGE
TOTAL

RECEIVED BY

MAX ALLOWABLE WATER

DELIVERY TICKET

BOE-C6-0134629

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Standard

STANDARD CONCRETE PRODUCTS, INC.

Serving Southern California since 1949

DELIVERY TICKET NO.

DATE

MEASURED AT: 49-2521092
17-Aug-98

PALOS VERDES
(310)-517-8225

SOLD TO 9 / SCHED ARRIVAL 14:00

CUSTOMER NO. CUSTOMER NAME
354 BEYLIK DRILLING, INC.

JOB ADDRESS
190TH & NORMANDIE
TORRANCE

CROSS STREET/SPECIAL INSTRUCTION
161

YD³ / M³ THIS TICKET	TOTAL YD³ / M³
10.00	10.00

NOS #

CUSTOMER JOB #
05-7981

P.O. #
05-7981

MAP PAGE
19763

PUC ZONE
19763

MIX DESIGN #	SACK CONTENT	PSI/MPa	TOP SIZE AGGREGATE	SLUMP/PENETRATION	CEMENT TYPE
721		N/S	SAND		II

10.3 SACK EQ SAND SLURRY (6.0

TRUCK #DRIVER
384 BRUCE D.

LOAD #
1

PRIVATE WEIGHMASTER
BY: [signature]

DEPUTY:

DATE:

LEAVE PLANT	ARRIVE JOB 1449	Cntr-Strt	
START UNLOAD 1451	FINISH UNLOAD 1552	Cntr-Arrv	
LEAVE JOB	ARRIVE PLANT	Cntr-Unld	

4 MINUTES PER CUBIC YARD/CUBIC METER FREE UNLOADING TIME ALLOWED. ADDITIONAL UNLOAD TIME CHARGED AT CURRENT RATE.

CUBIC YARDS/ CUBIC METERS	PRICE	EXTENSION
ADMIX		
PREVIOUS BALANCE		
SLC		
SUBTOTAL		
SALES TAX		
SUBTOTAL		
OVERTIME	MIN.	OVERTIME CHA

1032136

WATER ADDED AT JOB SITE
GALLONS/LITERS

PLANT WATER
ALLOW JOBWATER
MAX ALLOWABLE WATER

NOTE: 1 GAL. per Yd³/4.9 liters per M³ will increase slump by 1"/25.4mm and reduce the 28 day strength by 200 PSI/90.72 MPa.

TOTAL

STANDARD CONCRETE DOES NOT GUARANTEE THE PERFORMANCE OF COLOR IN ANY COLORED CONCRETE MIX. TRUCKS ARE RELEASED FROM ANY RESPONSIBILITY OF ADDITION OF COLORS OR ADMIXTURES AND FOR DAMAGES WHICH MAY BE INCURRED IN DELIVERING MATERIALS ACROSS SIDEWALK AND CURB. STANDARD CONCRETE DOES NOT GUARANTEE CONCRETE TEMPERATURE.

RECEIVED BY: [signature]

OTHER REMARKS

A CBR COMPANY

INSPECTORS COPY

Well No. 3 casing cement.
E.L.R.

ROBERTSON'S

OPEN 7 DAYS
P.O. BOX 33140, RIVERSIDE, CA 92519
PHONE (909) 685-2200

CONTROL NUMBER 486764

1018446764

#1 RIVERSIDE - 5830 VAN BUREN BLVD.
#2 MORENO VALLEY - 12890 DAY STREET
#3 REDLANDS - 3353 ALABAMA
#4 FONTANA - 13792 SLOVER
#5 POMONA - 2470 POMONA BLVD.
#6 HEMET/SAN JACINTO - 1675 STATE STREET
#7 BEAUMONT - 452 FIFTH PLACE
#8 SUN CITY - 27050 WATSON ROAD
#9 ARROWHEAD - 29750 HWY 18
#10 SANTA FE SPRINGS - 12311 GREENSTONE AVENUE
#11 CABAZON - 13990 APACHE TRAIL
#12 ANAHEIM HILLS - 2400 SANTA ANA CANYON RD.
#13 IRWINDALE - 13631 LIVE OAK LANE
#14 PASADENA - 1420 N. LINCOLN AVENUE
#15 VERNON-LOS ANGELES - 3365 E. 26TH STREET
#16 ANAHEIM - 201 E. COMMERCIAL
#17 SANTA ANA - 810 N. TOWNSEND
#18 LAKE FOREST - 23531 TOWN CENTRE
#19 ADELANTO - 12203 VIOLET RD.
#20 SAN CLEMENTE - 116 RINCON CT.
#21 IRVINE - 16081 CONSTRUCTION CIR. WEST

PLANT 15 DATE 08/20/98 CUSTOMER 35800 SOLD TO BEYLIK DRILLING INC MAP PAGE L764A2 TICKET NO. 486764

TX CD DELIVERY ADDRESS & INSTRUCTIONS 190TH & NORMANDIE DEAN 05-0816 05-6010
BOEING PLANT TORRANCE (562)691-0903 LAST TKS
Job Phone : (562)755-5813

CPU NO. 187 METER READING 600.00 TIME TYPED 11:23 TRUCK I.D. NO. 123456

LOAD NO. 1 SLUMP **** TRUCK 651 DRIVER 1155 COVARRUBIAS ED SLURRY
JOB START : 11:00

TO JOB 11:45 DRUM REVS
ON JOB 12:33
START POUR 12:33
FINISH POUR 12:38
LEAVE JOB 12:35
ARRIVE PLANT

Job-site Cylinder Test ☐ Yes
Water added on job at Customer's request.
_____ gals to Full Ld.
_____ gals to 2/3 Ld.
_____ gals to 1/3 Ld.
_____ ADJ Meter
Additional water added to this concrete will reduce its strength. Any water added is at customer's own risk.

TIME ON JOB _____ MIN. CHECK # _____
STAND BY _____ MIN. # CHECK ☐ AMOUNT BY
☐ Yes RATE OF $ _____ PER MIN. CASH ☐ AMOUNT BY
☐ Yes
☒ Yes MIN. $ _____ OVERTIME CHARGE PLANT MGR SIG

4 min per yd free unloading time allowed.
Additional unloading time charged at current hourly truck rate.

UNLOADING RELEASE

In event of default in payment of this ticket and it is necessary for seller to retain the services of an attorney by reason thereof, the buyer agrees to pay seller all costs and expenses incurred by reason thereof, including a reasonable attorney's fee plus 1½% interest per month.

In consideration of Robertson's Material Dealer delivering this purchased material to a place designated by the undersigned, the undersigned hereby releases and agrees to indemnify and hold harmless said Material Dealer, their Agents, employees and drivers from all liability or claims for damage done by it or them to all real and personal property at the location indicated hereon as a result of the movement of said Material. Dealer's vehicles or employees shall not be about such property. It is agreed that this release is intended to, and does cover, all movements of all vehicles of said Material Dealer at the location indicated hereof from the time such vehicles leave the curb line to enter upon the property described hereon until they return to such curb line, regardless of the number and/or dates of such deliveries or movements.

LOAD QUANTITY	CUMULATIVE QUANTITY	ORDERED QUANTITY	PRODUCT CODE	MIX AND COMMODITY DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	AMOUNT
10.00	10.00	13.00	35632	10.SSDWR	CY		

6 yd3 for Mushroom Cap in Well No.3 and 7 yd3 for No.2 (4 from This load)

DEL. CHARGE

LOAD WEIGHT SSD

WEIGHTMASTER CERTIFICATE
THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Dennis Whi ROBERTSON'S WEIGHTMASTER

TAX
PREVIOUS BALANCE
SUB TOTAL
STAND BY CHARGE
TOTAL

BY DEPUTY

MAX ALLOWABLE WATER

RECEIVED BY

DELIVERY TICKET

BOE-C6-0134631

OPEN 7 DAYS
P.O. BOX 33140, RIVERSIDE, CA 92519
PHONE (909) 685-2200

CONTROL NUMBER 486780

#1 RIVERSIDE - 6830 VAN BUREN BLVD.
#2 MORENO VALLEY - 12890 DAY STREET
#3 REDLANDS - 8353 ALABAMA
#4 FONTANA - 13792 SLOVER
#5 POMONA - 2470 POMONA BLVD.
#6 HEMET/SAN JACINTO - 1675 STATE STREET
#7 BEAUMONT - 452 FIFTH PLACE
#8 SUN CITY - 27050 WATSON ROAD
#9 ARROWHEAD - 29750 HWY. 18
#10 SANTA FE SPRINGS - 12311 GREENSTONE AVENUE
#11 CABAZON - 13990 APACHE TRAIL
#12 ANAHEIM HILLS - 2400 SANTA ANA CANYON RD.
#13 IRWINDALE - 13631 LIVE OAK LANE
#14 PASADENA - 1420 N. LINCOLN AVENUE
#15 VERNON/LOS ANGELES - 3365 E. 26TH STREET
#16 ANAHEIM - 201 E. COMMERCIAL
#17 SANTA ANA - 310 N. TOWNSEND
#18 LAKE FOREST - 23531 TOWN CENTRE
#19 ADELANTO - 12203 VIOLET RD.
#20 SAN CLEMENTE - 118 RINCON CT.
#21 IRVINE - 16061 CONSTRUCTION CIR. WEST

PLANT 15 DATE 08/20/98 CUSTOMER NO. 53680 SOLD TO BEYLIK DRILLING INC MAP PAGE L764A2 TICKET NO. 486780

TX CD DELIVERY ADDRESS & INSTRUCTIONS 190TH & NORMANDIE DEAN 05-0010 CUSTOMER P.O. / JOB OR LOT 05-0010
BOEING PLANT TORRANCE (562)691-0903 LAST TKS 651
Job Phone : (562)755-5813 ENTER OFF NORMANDIE

CPU NO. 187 METER READING 600.00 TIME TYPED 13:00 TRUCK LIC NO. 4R74599

LOAD NO. 2 SLUMP **** TRUCK 737 DRIVER 634 PASICA, GARY SLURRY
JOB START : 11:00

TO JOB 1313 DRUM REVS.
ON JOB 1349
START POUR 1352
FINISH POUR 1412
LEAVE JOB 1420
ARRIVE PLANT

Job-site Cylinder Test: Yes
Water added on job at Customer's request:
gals to Full Ld. Yes
0 gals to 2/3 Ld. Yes
gals to 1/3 Ld. Yes
ADJ. Meter
Additional water added to this concrete will reduce its strength. Any water added is at customer's own risk.

TIME ON JOB ____ MIN. CHECK # ____
STAND BY ____ MIN. CHECK AMOUNT BY
RATE OF X $ ____ PER MIN. CASH AMOUNT BY
4 MIN OVERTIME CHARGE PLANT MGR SIG.

__ min per yd. free unloading time allowed. Additional unloading time charged at current hourly truck rate.

In event of default in payment of this ticket and it is necessary for seller to retain the services of an attorney by reason thereof the buyer agrees to pay seller all costs and expenses incurred by reason thereof including a reasonable attorney's fee plus 1½% interest per month.

UNLOADING RELEASE

In consideration of Robertson's (Material Dealer) delivering this purchased material to a place designated by the undersigned, the undersigned hereby releases and agrees to indemnify and hold harmless said Material Dealer, their agents, employees and drivers from all liability or claims for damage done by it or them to all real and personal property at the location indicated hereon as a result of the movement of said Material Dealer's vehicles or employees upon or about such property.
This release is intended to and does cover all movements of all vehicles of said Material Dealer, at the location indicated hereon, from the time such vehicles leave the curb line to enter upon the property described hereon until they return to such curb line, regardless of the number and/or dates of such deliveries or movements.

LOAD QUANTITY	CUMULATIVE QUANTITY	ORDERED QUANTITY	PRODUCT CODE	MIX AND COMMODITY DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	AMOUNT
[illegible].00	13.00	15.00	35333	10.38SUR	CY		

3.00 SY

remaining 3 yd³ for Well No. 2 E.I.L.

DEL. CHARGE

LOAD WEIGHT SSD

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Dennis Wh[illegible] ROBERTSON'S WEIGHMASTER

BY DEPUTY

TAX
PREVIOUS BALANCE
SUB TOTAL
STAND BY CHARGE
TOTAL

MAX ALLOWABLE WATER

Robert Moody
RECEIVED BY

DELIVERY TICKET

101C540393

ROBERTSON'S

OPEN 7 DAYS
P.O. BOX 33140, RIVERSIDE, CA 92519
PHONE (909) 685-2200

CONTROL NUMBER 540393

#1 RIVERSIDE - 6830 VAN BUREN BLVD.
#2 MORENO VALLEY - 12890 DAY STREET
#3 REDLANDS - 8353 ALABAMA
#4 FONTANA - 13792 SLOVER
#5 POMONA - 2470 POMONA BLVD.
#6 HEMET/SAN JACINTO - 1675 STATE STREET
#7 BEAUMONT - 452 FIFTH PLACE
#8 SUN CITY - 27050 WATSON ROAD
#9 ARROWHEAD - 29750 HWY 18
#10 SANTA FE SPRINGS - 12311 GREENSTONE AVENUE
#11 CABAZON - 13990 APACHE TRAIL
#12 ANAHEIM HILLS - 2400 SANTA ANA CANYON RD.
#13 IRWINDALE - 13631 LIVE OAK LANE
#14 PASADENA - 1420 N. LINCOLN AVENUE
#15 VERNON-LOS ANGELES - 3365 E. 26TH STREET
#16 ANAHEIM - 201 E. COMMERCIAL
#17 SANTA ANA - 310 N. TOWNSEND
#18 LAKE FOREST - 29531 TOWN CENTRE
#19 ADELANTO - 12203 VIOLET RD.
#20 SAN CLEMENTE - 116 RINCON CT.
#21 IRVINE - 16081 CONSTRUCTION CIR. WEST

PLANT	DATE	CUSTOMER NO.	SOLD TO	MAP PAGE	TICKET NO.
10	08/24/98	53680	BEYLIK DRILLING INC	L764A2	540393

TX CD — DELIVERY ADDRESS & INSTRUCTIONS: S/W 190TH & NORMANDIE — DEAN — CUSTOMER P.O. / JOB OR LOT #: 05-8013 05-8013

TORRANCE (562)691-0903 LAST TKS 518

Job Phone :

CPU NO.	METER READING	TIME TYPED	TRUCK LIC NO.
154	800.00	12:54	4Y38812

LOAD NO.	SLUMP	TRUCK	DRIVER
2	8.00	508	1014 VERHELST MATT SLURRY

JOB START : 10:00

TO JOB 1307 — DRUM REVS.
ON JOB 1360
START HOUR 1410
FINISH HOUR 1430
LEAVE JOB
ARRIVE PLANT

Job-site Cylinder Test A/E ☐ Yes

Water added on job at Customer's request:
35 gals to Full Ld ☐ Yes
gals to 2/3 Ld ☒ Yes
gals to 1/3 Ld ☐ Yes
ADJ. Meter

TIME ON JOB ____ MIN
STAND BY ____ MIN
RATE OF X $ ____ PER MIN
$ ____ OVERTIME CHARGE

4 MIN

CHECK # ____
CHECK ☐ AMOUNT ____ BY ____
CASH ☐ AMOUNT ____ BY ____
PLANT MGR SIG ____

Additional water added to this concrete will reduce its strength. Any water added is at customer's own risk.

4 min. per yd. free unloading time allowed. Additional unloading time charged at current hourly truck rate.

In event of default in payment of this ticket and it is necessary for seller to retain the services of an attorney by reason thereof, the buyer agrees to pay seller all costs and expenses incurred by reason thereof including a reasonable attorney's fee plus 1½% interest per month.

UNLOADING RELEASE

In consideration of Robenson's (Material Dealer) delivering this purchased material to the place designated by the undersigned, the undersigned hereby releases and agrees to indemnify and hold harmless said Material Dealer, their Agents, employees and drivers from all liability or claims for damage done by it, or them, to all real and personal property at the location indicated hereon as a result of the movement of said Material Dealer's vehicles or employees upon or about such property.
This release is intended to and does cover all movements of all vehicles of said Material Dealer, at the location indicated hereon, from the time such vehicles leave the curb line to enter upon the property described hereon until they return to such curb line regardless of the number and/or dates of such deliveries or movements.

LOAD QUANTITY	CUMULATIVE QUANTITY	ORDERED QUANTITY	PRODUCT CODE	MIX AND COMMODITY DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	AMOUNT
10.00	20.00	20.00	35333	10.3SLUR	CY		

Customer only ordered 3½ yards

A total of 6 yds used from this load for well No. 2 G.L.

LOAD WEIGHT SSD:

DEL. CHARGE

TAX

PREVIOUS BALANCE

SUB TOTAL

STAND BY CHARGE

TOTAL

WEIGHMASTER CERTIFICATE
THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

ROBERTSON'S WEIGHMASTER
Dave Galias
BY DEPUTY

RECEIVED BY

MAX ALLOWABLE WATER

DELIVERY TICKET

BOE-C6-0134633

ROBERTSON'S

OPEN 7 DAYS
P.O. BOX 33140, RIVERSIDE, CA 92519
PHONE (909) 685-2200

CONTROL NUMBER 486999

1D1C4864997

#1 RIVERSIDE - 6830 VAN BUREN BLVD.
#2 MORENO VALLEY - 12890 DAY STREET
#3 REDLANDS - 6353 ALABAMA
#4 FONTANA - 13792 SLOVER
#5 POMONA - 2470 POMONA BLVD.
#6 HEMET/SAN JACINTO - 1675 STATE STREET
#7 BEAUMONT - 452 FIFTH PLACE
#8 SUN CITY - 27050 WATSON ROAD
#9 ARROWHEAD - 29750 HWY 18
#10 SANTA FE SPRINGS - 12311 GREENSTONE AVENUE
#11 CABAZON - 13990 APACHE TRAIL
#12 ANAHEIM HILLS - 2400 SANTA ANA CANYON RD.
#13 IRWINDALE - 13531 LIVE OAK LANE
#14 PASADENA - 1420 N. LINCOLN AVENUE
#15 VERNON-LOS ANGELES - 3365 E. 26TH STREET
#16 ANAHEIM - 201 E. COMMERCIAL
#17 SANTA ANA - 810 N. TOWNSEND
#18 LAKE FOREST - 26531 TOWN CENTRE
#19 ADELANTO - 11203 VIOLET RD.
#20 SAN CLEMENTE - 116 RINCON CT.
#21 IRVINE - 16061 CONSTRUCTION CIR. WEST

PLANT 15 DATE 08/24/98 CUSTOMER NO. 53680 SOLD TO BEYLIK DRILLING INC MAP PAGE 764A2 TICKET NO. 486999

S/W 190TH & NORMANDIE — DEAN — 05-8013 — 05-8013
TX CD — DELIVERY ADDRESS & INSTRUCTIONS — TORRANCE — (562)691-0983 LAST TKT — CUSTOMER PO / JOB OR LOT #

Job Phone :

CPU NO.	METER READING	TIME TYPED	TRUCK LIC NO.		
154	800.00	11:18	4Y38956		
LOAD NO	SLUMP	TRUCK	DRIVER		
1	8.00	518	1060	MORAN DANIEL	SLURRY

JOB START : 10:00

DRUM REVS:

TO JOB 1137
ON JOB 12:13
START POUR 12:15
FINISH POUR
LEAVE JOB
ARRIVE PLANT

Job-site Cylinder Test: ☐ Yes

Water added on job at Customer's request:
gals to Full Ld.
gals to 2/3 Ld.
gals to 1/3 Ld.
ADJ Meter

Additional water added to this concrete will reduce its strength. Any water added is at customer's own risk.

TIME ON JOB MIN
STAND BY MIN
☐ Yes RATE OF $ PER MIN.
☐ Yes
☐ Yes MIN $ OVERTIME CHARGE

CHECK #
CHECK ☐ AMOUNT BY
CASH ☐ AMOUNT BY
PLANT MGR SIG

4 min./cy. free unloading time allowed.
Additional unloading time charged at current hourly truck rate.

UNLOADING RELEASE

In event of default in payment of this ticket and in consideration of Robertson's (Material Dealer) delivering this purchased material to a place designated by the undersigned, the undersigned necessary for seller to retain the services of an attorney, hereby releases and agrees to indemnify and hold harmless said Material Dealer, their Agents, employees and drivers from all liability for claims thereof, including a reasonable attorney's fee plus 1½% interest per month. attorney by reason thereof, the buyer agrees to pay seller all costs and expenses incurred by reason Dealer's vehicles or employees upon or about such property. for damage done by it, or them, to all real and personal property at the location indicated hereon as a result of the movement of said Material

This release is intended to and does cover all movements of all vehicles of said Material Dealer at the location indicated hereon from the time such vehicles leave the curb line to enter upon the property described hereon until they return to such curb line, regardless of the number and/or dates of such deliveries or movements.

LOAD QUANTITY	CUMULATIVE QUANTITY	ORDERED QUANTITY	PRODUCT CODE	MIX AND COMMODITY DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	AMOUNT
10.00	10.00	10.00	35835	10.3SLUR	CY		

DEL. CHARGE

LOAD WEIGHT SSD:

WEIGHTMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Dennis Wheeler ROBERTSON'S WEIGHTMASTER

BY DEPUTY

MAX ALLOWABLE WATER

TAX
PREVIOUS BALANCE
SUB TOTAL
STAND BY CHARGE
TOTAL

RECEIVED BY

DELIVERY TICKET

BOE-C6-0134634